

Curriculum Vitae - Dr. Fabio Verginelli, PhD

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Personal data

Name: Fabio Verginelli

Place and date of birth: Rome, February, 18, 1970

Citizenship: Italian

Work address: University "G. d'Annunzio" of Chieti-Pescara, Via dei Vestini, 31 66100 Chieti, Italy

Affiliation 1: Department of Pharmacy, "G. d'Annunzio" University - Chieti-Pescara, 66100 Chieti, Italy

Affiliation 2: Center for Advanced Studies (CAST), "G. d'Annunzio" University of Chieti-Pescara, 66100 Chieti, Italy

Phone Number: +39 0871 3554576

Email: fabio.verginelli@unich.it

Orcid Id: <http://orcid.org/0000-0002-8636-2517>

Education and qualifications

1994-1996 - Undergraduate internship at Department of Oncology and Neuroscience - Section of Molecular Pathology, "Gabriele D'Annunzio" University - Chieti

1996 - Graduation in Biological Sciences "cum laude" at University "La Sapienza" of Rome

1999 - Qualification for Professional Practicing in Biological Sciences

1996-2000 - PhD student in Paleopathology (Ancient DNA studies)

2001 - PhD in Paleopathology at Catholic University "A. Gemelli" of Rome

Employments and Academic Ranks

October 1996 - July 1997 - Research contract conferred from the Archaeological Superintendence of Rome - Ministry for Cultural and Environmental Heritage focused on "Paleogenetic analysis of anthropological remains (50 individuals) from the Vallerano necropolis"

January 1999 - October 1999 - Research contract conferred from the Archaeological Superintendence of Rome - Ministry for Cultural and Environmental Heritage focused on "Paleogenetic analysis of 26 ancient skeletal remains from the necropolises discovered along the route of the High Speed Railway (T.A.V.)"

2001 - Research contract, Department of Human and Animal Biology, University "La Sapienza" of Rome focused on "analysis of human mitochondrial sequences from Asian and sub-Saharan populations"

2002-2004 - Research contract conferred from the Department of Oncology and Neurosciences, University "G. d'Annunzio", Chieti, focused "on the study of molecular physiopathology of hereditary gastrointestinal and breast cancer"

2005-present - University Staff Researcher, General Pathology, University G. d'Annunzio Chieti-Pescara, Department of Pharmacy

Teaching activity and related institutional responsibilities

2005-present - Teacher of General Pathology for the Course of Pharmaceutical Chemistry and Technology, University G. d'Annunzio Chieti-Pescara

2007 - Invited lecturer at "Molecular diagnostics: basic principles and applications" course accredited by the Ministry of Health (ECM, 12 credits) directed to Biomedical Laboratory Technicians. Department of Laboratory Medicine and Advanced Biotechnology, IRCCS San Raffaele - Pisana, Rome

2005-present - Member of a graduation thesis Defence Committee for the Course of Pharmaceutical Chemistry and Technology, University G. d'Annunzio Chieti-Pescara;

2005-present - Member of a graduation thesis Defence Committee for the Course of Pharmacy, University G. d'Annunzio Chieti-Pescara

2005-2011 - Committee member for the PhD student track in "Oncology and Molecular Pathology" (XXI, XXII and XXIII cycles), Scuola Superiore di Dottorato, G. d'Annunzio University, Chieti, Italy

2007 - Member of the Committee for PhD Defence in "Environment and Territory" (XIX cycle) at the Department of Sciences and Technologies for the Environment and the Territory, University of Molise

Memberships in Scientific Societies

2016-present - Italian Society of Pathology and Translational Medicine (SIPMET)

2019-present - European Network for the Study of Adrenal Tumours (ENS@T)

Reviewing Activities

2020-present - Topic Board Member, *Microorganism* (MDPI)

Ad hoc referee for the following scientific journals:

- *Frontiers in Medicine* (Frontiers publisher)
- *Investigational New Drugs* (Springer Nature)
- *International Journal of Cancer* (Wiley & sons)
- *BMC Evolutionary Biology* (Springer Nature)

Websites database reporting research activity and indexed publications

Orcid Id: <http://orcid.org/0000-0002-8636-2517>

Scopus Parameters: H-index: 15, citations: 771; accessed on May 11, 2020)

Scientific Achievements

Since 2009 scientific activity of Dr. Fabio Verginelli has been involved on the study of genetic/epigenetic pathways dysregulated in paragangliomas (Cama et al., 2013), including alterations induced by viral infection. In particular, the discovery of a constitutive HCMV-like virus in paragangliomas led to focus the research on viral particles isolation from tumors and on their characterization, in terms of oncogenic effects. To this end, the development of a protocol based on modified Rous method (1911) coupled with PEG precipitation allowed isolation of HCMV particles from PGL, virus phenotyping by FACS and analysis of the *in vitro* effects induced by infection/superinfection with such particles (ms in preparation, data were presented at international meetings such as SIPMeT 2018, SIPMeT-young 2019 and ENS@T 2019). Furthermore, considering the lack of paraganglioma models, the development of cell and xenograft models has allowed to study the development of HNPG, the stem markers characterizing the cells initiating tumor and to experiment drugs for preclinical therapies (Florio et al., 2017, Florio et al., 2018, Verginelli et al., 2018, Lotti et al., 2019).

Other achievements in cancer research have been obtained studying the role of environmental factors on tumors etiology such as a) the virulence variability of *H. pylori* strains for gastric cancer (Rocco et al., 2006, Grande et al., 2012, Toracchio et al., 2020); b) the influence of diet on colorectal mutagenesis highlighted by correlation between exposure to nitrosative DNA damage due to foods that promote metabolic stress and chronic inflammation such as meat, milk, sweeteners and animal fats, the energy-dense foods at the basis of "Western" diets and colorectal cancer-associated Tp53 mutation patterns (Bishehsari et al., 2007, Verginelli et al., 2009); c) the interaction between reproductive factors and BRCA1, BRCA2 and p53 genetic background for premenopausal breast cancer onset in Sudanese population (Awadelkarim et al., 2007, Aceto et al., 2019). Achievements in other area than cancer research were obtained by studies carried out in collaboration with the Microbiology Section at CAST headed by Prof. Di Bonaventura. The collaboration allowed to better define the role played by the multidrug efflux pump in the pharmacological resistance by genotyping and phenotyping of bacteria characterized by biofilm production and high virulence such as *Stenotrophomonas maltophilia* and *Pseudomonas aeruginosa* isolated from lungs of cystic fibrosis patients (Pompilio et al., 2011, Pompilio et al., 2015, Pompilio et al., 2016) or *Myroides odoratimimus*, an opportunistic environmental pathogen clinically found in recurrent ulcers of immune-compromised subjects (Pompilio et al., 2017, Pompilio et al., 2018).

Early career achievements are related to investigation of genetic structure variation of human populations through the analysis of mitochondrial genome, Y chromosome haplotypes and autosomal repeated variable sequences (STR) followed by data interpretation using non-parametric statistical analysis and by applying clustering techniques (Destro-Bisol et al., 2004, Destro-Bisol et al., 2004, Tofanelli et al., 2009). Moreover, phylogenetic analysis of ancient mtDNA recovered from prehistoric canids provided support for the involvement of European wolves in the origins of the three major dog clades and supporting multiple independent domestication events (Verginelli et al., 2005, Verginelli et al., 2006).

Grant supports

- **PRIN 2017-** (2020-2023) project on "Extracellular vesicles in cancer development, progression and drug resistance: potential biomarkers and therapeutic targets". Grant protocol 2017EKMFTN_005 (P.I. Catalano S; Position in the project: **Collaborator**)
- **PRIN 2015-** (2017-2020) project on "Useful experimental models for dissecting the molecular links between cancer development/progression and the obesity epidemic" grant protocol: 2015B7M39T_006 (P.I. Andò S; Position in the project: **Collaborator**);
- **AIRC 2015-** (2016-2018) project on "New role of HCMV in head/neck paraganglioma: functional loops controlled by host miRNAs and novel therapeutic targets" Grant protocol: IG16932 (P.I. Prof R. Mariani-Costantini; Position in the project: **Collaborator**);
- **PRIN 2010-2011-** (2013-2016) project on "Cancer, stem/progenitor cells and the tumor microenvironment: new networks to target". Grant protocol: 2010NFEB9L_008 (P.I. Prof Andò S; Position in the project: **Collaborator**);
- **AIRC 2009-** (2009-2012) project on "Probing hypoxia-driven oncogenic progression via pathway dependencies: the paraganglioma paradigm" (P.I. Prof R. Mariani-Costantini; Position in the project: **Collaborator**);
- **PRIN 2002-** (16/12/2002 - 14/01/2005) project on "Molecular genetics of gastric cancer in high and low risk populations: correlation between molecular data and epidemiological features". Grant protocol: 2002068725_002 (P.I. Prof. Nardone G; Position in the project: **Collaborator**);
- **M.U.R.S.T 2002 -** (2003-11/2005-12) project on "Paleopatologia molecolare delle malattie neoplastiche ed infettive". Grant Protocol: 2003067835_005 (P.I. Prof R. Mariani-Costantini; Position in the project: **Collaborator**)
- **M.U.R.S.T 2000-** (2000-12 to 2003-01) project on "Paleopathology of the population of ancient Rome and ancient DNA analysis directed to verify the possibility of genetic studies" Grant protocol: MM10264872_003 (P.I. Prof R. Mariani-Costantini; Position in the project: **Collaborator**);
- **CNR 1996-** (1996-01/2000-12) Progetto Finalizzato Beni Culturali - Sottoprogetto 4: Analisi e conservazione della diversità biologica: "archivio" botanico, zoologico, antropologico" P.I. Prof R. Mariani-Costantini; Position in the project: **Collaborator**).

Others grant supports

- **FAR-** (2018-2019) (University Research Funds) project on "Pharmacological inhibition of HIF2a in paraganglioma cell cultures superinfected with HCMV-VR1814 laboratory strain" (Position in the project: **Principal investigator**).
- **FAR-** (2017) (University Research Funds) project on "Role of HCMV in the onset and progression of paragangliomas" (Position in the project: **Principal investigator**).
- **FAR-** (2016) (University Research Funds) project on "Viral etiopathogenesis of head-neck paragangliomas" (Position in the project: **Principal investigator**).
- **FAR-** (2014-2015) (University Research Funds) project on "Role of Notch and microRNAs families 34s and 200s in divergent differentiation of tumor stem cells of paraganglioma towards endothelial, glial and neuronal cells and therapeutic targets " (Position in the project: **Principal investigator**).
- **FAR-** (2012-2013) (University Research Funds) project on "Molecular characterization of head and neck paragangliomas " (Position in the project: **Principal investigator**).
- **FAR-** (2009-2011) (University Research Funds) project on "Role of the beta-GBP antiproliferative cytokine in colorectal cancer and study of molecular pathways involved in the drug response" (Position in the project: **Principal investigator**).
- **FAR-** (2008) (University Research Funds) project on "Evaluation of apoptosis and gene expression profiles in a murine cell model (BALB c / 3T3) exposed to environmental concentrations of micro- and nanoparticles of cobalt " (Position in the project: **Principal investigator**).

Peer reviewed publications

1. Toracchio S, Caruso RA, Perconti S, Rigoli L, Betri E, Neri M, **Verginelli F**, Mariani-Costantini R. (2020) Evolutionarily-Related *Helicobacter pylori* Genotypes and Gastric Intraepithelial Neoplasia in a High-Risk Area of Northern Italy. *Microorganisms* 8(3). pii: E324. doi: 10.3390/microorganisms8030324.
2. Florio R, Veschi S, di Giacomo V, Pagotto S, Carradori S, **Verginelli F**, Cirilli R, Casulli A, Grassadonia A, Tinari N, Cataldi A, Amoroso R, Cama A, De Lellis L. (2019) The Benzimidazole-Based Anthelmintic Parbendazole: A Repurposed Drug Candidate That Synergizes with Gemcitabine in Pancreatic Cancer. *Cancers (Basel)* 11(12). pii: E2042. doi:10.3390/cancers11122042
3. Cirone M, Lotti LV, Granato M, Renzo L Di, Biunno I, Cattaneo M, **Verginelli F**, Vespa S, Davies D, Wells V, Mariani-Costantini R, Mallucci L (2019) Sourcing the immune system to induce immunogenic cell death in Kras-colorectal cancer cells. *Br J Cancer* 1–8. doi: 10.1038/s41416-019-0561-z
4. Giampietro L, Laghezza A, Cerchia C, Florio R, Recinella L, Capone F, Ammazalorso A, Bruno I, De Filippis B, Fantacuzzi M, Ferrante C, Maccallini C, Tortorella P, **Verginelli F**, Brunetti L, Cama A, Amoroso R, Loiodice F, Lavecchia (2019) Novel Phenyldiazanyl Fibrate Analogues as PPAR $\alpha/\gamma/\delta$ Pan-Agonists for the Amelioration of Metabolic Syndrome. *ACS Med Chem Lett* 10:545–551. doi: 10.1021/acsmedchemlett.8b00574
5. Aceto GM, Awadelkarim KD, Di Nicola M, Moscatello C, Pantalone MR, **Verginelli F**, Elwali NE, Mariani-Costantini R (2019) Germline TP53 mutation spectrum in Sudanese premenopausal breast cancer patients: correlations with reproductive factors. *Breast Cancer Res Treat* 175:479–485. doi: 10.1007/s10549-019-05168-1
6. Lotti LV, Vespa S, Pantalone MR, Perconti S, Esposito DL, Visone R, Veronese A, Paties CT, Sanna M, **Verginelli F**, Naucler CS, Mariani-Costantini R (2019) A developmental perspective on paragangliar tumorigenesis. *Cancers (Basel)* 11. doi: 10.3390/cancers11030273
7. Florio R, De Lellis L, Veschi S, **Verginelli F**, di Giacomo V, Gallorini M, Perconti S, Sanna M, Mariani-Costantini R, Natale A, Cataldi A, Cama A (2018) Effects of dichloroacetate as single agent or in combination with GW6471 and metformin in paraganglioma cells. *Sci Rep* 8. doi: 10.1038/s41598-018-31797-5
8. Pompilio A, Galardi G, Gherardi G, **Verginelli F**, Geminiani C, Piloni AP, Catalanotti P, Di Bonaventura G (2018) Infection of recurrent calcaneal ulcer caused by a biofilm-producer *Myroides odoratimimus* strain. *Folia Microbiol (Praha)* 63:203–207. doi: 10.1007/s12223-017-0552-5
9. **Verginelli F**, Perconti S, Vespa S, Schiavi F, Prasad SC, Lanuti P, Cama A, Tramontana L, Esposito DL, Guarnieri S, Lotti LV, Mariani-Costantini R (2018) Paragangliomas arise through an autonomous vasculo-angio-neurogenic program inhibited by imatinib. *Acta Neuropathol* 135:779–798. doi: 10.1007/s00401-017-1799-2
10. Ammazalorso A, De Lellis L, Florio R, Bruno I, De Filippis B, Fantacuzzi M, Giampietro L, Maccallini C, Perconti S, **Verginelli F**, Cama A, Amoroso R (2017) Cytotoxic effect of a family of peroxisome proliferator-activated receptor antagonists in colorectal and pancreatic cancer cell lines. *Chem Biol Drug Des* 90:1029–1035. doi: 10.1111/cbdd.13026
11. Florio R, De Lellis L, Di Giacomo V, Di Marcantonio MC, Cristiano L, Basile M, **Verginelli F**, Verzilli D, Ammazalorso A, Prasad SC, Mincione G, Cama A (2017) Effects of PPAR α inhibition in head and neck paraganglioma cells. *PLoS One* 12. doi: 10.1371/journal.pone.0178995
12. Pompilio A, Galardi G, **Verginelli F**, Muzzi M, Di Giulio A, Di Bonaventura G (2017) *Myroides odoratimimus* forms structurally complex and inherently antibiotic-resistant biofilm in a wound-like in vitro model. *Front Microbiol* 8. doi: 10.3389/fmicb.2017.02591
13. Ammazalorso A, Carrieri A, **Verginelli F**, Bruno I, Carbonara G, D'Angelo A, De Filippis B, Fantacuzzi M, Florio R, Fracchiolla G, Cama A, Amoroso R (2016) Synthesis, in vitro evaluation, and molecular modeling investigation of benzenesulfonimide peroxisome proliferator-activated receptors α antagonists. *Eur J Med Chem* 114:191–200. doi: 10.1016/j.ejmech.2016.02.064
14. Marcovecchio ML, Florio R, **Verginelli F**, De Lellis L, Capelli C, Verzilli D, Chiarelli F, Mohn A, Cama A (2016) Low AMY1 gene copy number is associated with increased body mass index in prepubertal boys. *PLoS One* 11. doi: 10.1371/journal.pone.0154961

15. Pompilio A, Crocetta V, **Verginelli F**, Di Bonaventura G (2016) In vitro activity of levofloxacin against planktonic and biofilm *Stenotrophomonas maltophilia* lifestyles under conditions relevant to pulmonary infection in cystic fibrosis, and relationship with SmeDEF multidrug efflux pump expression. *FEMS Microbiol Lett* 363. doi: 10.1093/femsle/fnw145
16. Veronese A, Pepe F, Chiacchia J, Pagotto S, Lanuti P, Veschi S, Di Marco M, D'Argenio A, Innocenti I, Vannata B, Autore F, Marchisio M, Wernicke D, **Verginelli F**, Leone G, Rassenti LZ, Kipps TJ, Mariani-Costantini R, Laurenti L, Croce CM, Visone R (2015) Allele-specific loss and transcription of the miR-15a/16-1 cluster in chronic lymphocytic leukemia. *Leukemia* 29:86–95. doi: 10.1038/leu.2014.139
17. Pompilio A, Crocetta V, De Nicola S, **Verginelli F**, Fiscarelli E, Di Bonaventura G (2015) Cooperative pathogenicity in cystic fibrosis: *Stenotrophomonas maltophilia* modulates *Pseudomonas aeruginosa* virulence in mixed biofilm. *Front Microbiol* 6. doi: 10.3389/fmicb.2015.00951
18. Cama A, **Verginelli F**, Lotti LV, Napolitano F, Morgano A, D'Orazio A, Vacca M, Perconti S, Pepe F, Romani F, Sanna M, Mariani-Costantini R (2013) Integrative genetic, epigenetic and pathological analysis of paraganglioma reveals complex dysregulation of NOTCH signaling. *Acta Neuropathol* 126:575–594. doi: 10.1007/s00401-013-1165-y
19. Perconti S, Aceto GM, **Verginelli F**, Napolitano F, Petrarca C, Bernardini G, Raiconi G, Tagliaferri R, Sabbioni E, Di Gioacchino M, Di Gioacchino M, Mariani-Costantini R (2013) Distinctive gene expression profiles in Balb/3T3 cells exposed to low dose cobalt nanoparticles, microparticles and ions: Potential nanotoxicological relevance. *J Biol Regul Homeost Agents* 27:443–454 ISSN: 0393974X
20. Esposito DL, **Verginelli F**, Toracchio S, Mammarella S, De Lellis L, Vanni C, Russo A, Mariani-Costantini R, Cama A (2013) Novel insulin receptor substrate 1 and 2 variants in breast and colorectal cancer. *Oncol Rep* 30:1553–1560. doi: 10.3892/or.2013.2626
21. Mallucci L, Shi D-Y, Davies D, Jordan P, Nicol A, Lotti L, Mariani-Costantini R, **Verginelli F**, Wells V, Zicha D (2012) Killing of Kras-mutant colon cancer cells via Rac-independent actin remodeling by the β GBP cytokine, a physiological PI3K inhibitor therapeutically effective in vivo. *Mol Cancer Ther* 11:1884–1893. doi: 10.1158/1535-7163.MCT-11-1041-T
22. Grande R, Di Campi E, Di Bartolomeo S, **Verginelli F**, Di Giulio M, Baffoni M, Bessa LJ, Cellini L (2012) *Helicobacter pylori* biofilm: A protective environment for bacterial recombination. *J Appl Microbiol* 113:669–676. doi: 10.1111/j.1365-2672.2012.05351.x
23. Pompilio A, Pomponio S, Crocetta V, Gherardi G, **Verginelli F**, Fiscarelli E, Dicuonzo G, Savini V, D'Antonio D, Di Bonaventura G (2011) Phenotypic and genotypic characterization of *Stenotrophomonas maltophilia* isolates from patients with cystic fibrosis: Genome diversity, biofilm formation, and virulence. *BMC Microbiol* 11. doi: 10.1186/1471-2180-11-159
24. Tofanelli S, Ferri G, Bulayeva K, Caciagli L, Onofri V, Taglioli L, Bulayev O, Boschi I, Alù M, Berti A, Rapone C, Beduschi G, Luiselli D, Cadenas AM, Awadelkarim KD, Mariani-Costantini R, Elwali NE, **Verginelli F**, Pilli E, Herrera RJ, Gusmão L, Paoli G, Capelli C (2009) J1-M267 Y lineage marks climate-driven pre-historical human displacements. *Eur J Hum Genet* 17:1520–1524. doi: 10.1038/ejhg.2009.58
25. **Verginelli F**, Bishehsari F, Napolitano F, Mahdavinia M, Cama A, Malekzadeh R, Miele G, Raiconi G, Tagliaferri R, Mariani-Costantini R (2009) Transitions at CpG dinucleotides, geographic clustering of TP53 mutations and food availability patterns in colorectal cancer. *PLoS One* 4. doi: 10.1371/journal.pone.0006824
26. **Verginelli F**, Aru F, Battista P, Mariani-Costantini R (2009) Nutrigenetics in the light of human evolution. *J Nutrigenet Nutrigenomics* 2:91–102. doi: 10.1159/000228251
27. Rigoli L, Di Bella C, **Verginelli F**, Falchetti M, Bersiga A, Rocco A, Nardone G, Mariani-Costantini R, Caruso RA (2008) Histological heterogeneity and somatic mtDNA mutations in gastric intraepithelial neoplasia. *Mod Pathol* 21:733–741. doi: 10.1038/modpathol.2008.58
28. Mahdavinia M, Bishehsari F, **Verginelli F**, Cumashi A, Lattanzio R, Sotoudeh M, Ansari R, Semeraro D, Hormazdi M, Fakheri H, Iacobelli S, Mariani-Costantini R (2008) P53 mutations in colorectal cancer from Northern Iran: Relationships with site of tumor origin, microsatellite instability and K-ras mutations. *J Cell Physiol* 216:543–550. doi: 10.1002/jcp.21428

29. Mammarella S, Creati B, Staniscia T, **Verginelli F**, Manzoli L, Di Valerio A, Aceto G, Romano F, Cama G, Capani F, Quon MJ, Cama A (2007) Obesity modifies the effects of the Asp905Tyr variant of PPP1R3A on risk of type 2 diabetes and insulin sensitivity. *Diabetes, Obes Metab* 9:759–761. doi: 10.1111/j.1463-1326.2006.00699.x
30. Awadelkarim KD, Aceto G, Veschi S, Elhaj A, Morgano A, Mohamedani AA, Eltayeb EA, Abuidris D, Di Gioacchino M, Battista P, **Verginelli F**, Cama A, Elwali NE, Mariani-Costantini R. (2007) BRCA1 and BRCA2 status in a central Sudanese series of breast cancer patients: Interactions with genetic, ethnic and reproductive factors. *Breast Cancer Res Treat* 102:189–199. doi: 10.1007/s10549-006-9303-z
31. Bishehsari F, Mahdavinia M, Malekzadeh R, Mariani-Costantini R, Miele G, Napolitano F, Raiconi G, Tagliaferri R, **Verginelli F** (2007) PCA based feature selection applied to the analysis of the international variation in diet. In *Lecture Notes in Computer Science* (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) (Vol. 4578 LNAI, pp. 551–556). https://doi.org/10.1007/978-3-540-73400-0_70
32. **Verginelli F**, Capelli C, Coia V, Musiani M, Falchetti M, Ottini L, Palmirotta R, Tagliacozzo A, Mazzorin IG, Mariani-Costantini R (2006) The origins of dogs: archaeozoology, genetics, and ancient DNA | Domesticazione ed evoluzione dei cani: dati genetici, archeozoologici e ruolo del DNA antico. *Med Secoli* 18:741–754 ISSN: 03949001
33. Petrarca C, Perrone A, Verna N, **Verginelli F**, Ponti J, Sabbioni E, Di Giampaolo L, Dadorante V, Schiavone C, Boscolo P, Mariani Costantini R, Di Gioacchino M (2006) Cobalt nano-particles modulate cytokine in vitro release by human mononuclear cells mimicking autoimmune disease. *Int J Immunopathol Pharmacol* 19:11–14. doi: 10.1177/205873920601900103
34. Battaggia C, Destro-Bisol G, Palmirotta R, **Verginelli F**, Mariani-Costantini R, Cama A (2006) Variation of the insulin receptor substrate gene (IRS-1) in African Pygmies and Bantus [1]. *Diabetes Res Clin Pract* 72:108–109. doi: 10.1016/j.diabres.2005.09.001
35. Bishehsari F, Mahdavinia M, Malekzadeh R, **Verginelli F**, Catalano T, Sotoudeh M, Bazan V, Agnese V, Esposito DL, De Lellis L, Russo A, Mariani-Costantini R (2006) Patterns of K-ras mutation in colorectal carcinomas from Iran and Italy (a Gruppo Oncologico dell'Italia Meridionale study): Influence of microsatellite instability status and country of origin. *Ann Oncol* 17. doi: 10.1093/annonc/mdl959
36. Rocco A, Caruso S, Toracchio S, Rigoli L, **Verginelli F**, Catalano T, Neri M, Curia MC, Ottini L, Agnese V, Mariani-Contantini R, Nardone G (2006) Gastric adenomas: Relationship between clinicopathological findings, Helicobacter pylori infection, APC mutations and COX-2 expression. *Ann Oncol* 17. doi: 10.1093/annonc/mdl961
37. Catalano T, Curia MC, Aceto G, **Verginelli F**, Cascinu S, Cama A, Mariani-Costantini R, Teti D, Battista P (2005) Mutations in the p753 and Ki-ras genes, microsatellite instability and site of tumor origin in colorectal cancer. *Oncol Rep* 14:625–631. doi: 10.3892/or.14.3.625
38. Coia V, Destro-Bisol G, **Verginelli F**, Battaggia C, Boschi I, Cruciani F, Spedini G, Comas D, Calafell F (2005) Brief Communication: mtDNA variation in North Cameroon: Lack of Asian lineages and implications for back migration from Asia to Sub-Saharan Africa. *Am J Phys Anthropol* 128:678–681. doi: 10.1002/ajpa.20138
39. **Verginelli F**, Capelli C, Coia V, Musiani M, Falchetti M, Ottini L, Palmirotta R, Tagliacozzo A, De Grossi Mazzorin I, Mariani-Costantini R (2005) Mitochondrial DNA from prehistoric canids highlights relationships between dogs and South-East European wolves. *Mol Biol Evol* 22:2541–2551. doi: 10.1093/molbev/msi248
40. Destro-Bisol G, Coia V, Boschi I, **Verginelli F**, Caglià A, Pascali V, Spedini G, Calafell F (2004) The analysis of variation of mtDNA hypervariable region 1 suggests that Eastern and Western Pygmies diverged before the Bantu expansion. *Am Nat* 163:212–226. doi: 10.1086/381405
41. Destro-Bisol G, Donati F, Coia V, Boschi I, **Verginelli F**, Caglià A, Tofanelli S, Spedini G, Capelli C (2004) Variation of female and male lineages in sub-Saharan populations: The importance of sociocultural factors. *Mol Biol Evol* 21:1673–1682. doi: 10.1093/molbev/msh186
42. Palmirotta R, Matera S, Curia MC, Aceto G, El Zhobi B, **Verginelli F**, Guadagni F, Casale V, Stigliano V, Messerini L, Battista P, Cama A (2004) Correlations between phenotype and microsatellite

- instability in HNPCC: Implications for genetic testing. *Fam Cancer* 3:117–121. doi: 10.1023/B:FAME.0000039864.19083.3a
43. **Verginelli F**, Donati F, Coia V, Boschi I, Palmirotta R, Battista P, Costantini RM, Destro-Bisol G (2003) Variation of the hypervariable region-1 of mitochondrial DNA in central-eastern Italy. *J Forensic Sci* 48:443–444. doi: 10.1520/jfs2002350
 44. **Verginelli F**, Ottini L, Esposito D, Cama A, Battista P, Ciranni R, Zavaglia K, Mariani-Costantini R, Fornaciari G (2002) Ancient DNA studies: from paleopathology to population genetics | *Medicina molecolare e storia della medicina: dalla paleopatologia alla genetica delle popolazioni. Med Secoli* 14:587–607 ISSN: 03949001
 45. Palmirotta R, **Verginelli F**, Cama A, Mariani-Costantini R, Frati L, Battista P (1998) Origin and gender determination of dried blood on a statue of the Virgin Mary. *J Forensic Sci* 43:431–434. doi: 10.1520/jfs16163j
 46. Palmirotta R, **Verginelli F**, Di Tota G, Battista P, Cama A, Caramiello S, Capasso L, Mariani-Costantini R (1997) Use of a Multiplex Polymerase Chain Reaction Assay in the Sex Typing of DNA Extracted from Archaeological Bone. *Int J Osteoarchaeol* 7:605–609. doi: 10.1002/(sici)109212(199711/12)7:6<605::aid-oa365>3.3.co;2-i

10 Most Significant Publications (all career)

1. Lotti LV, Vespa S, Pantalone MR, Perconti S, Esposito DL, Visone R, Veronese A, Paties CT, Sanna M, **Verginelli F**, Naclér CS, Mariani-Costantini R (2019) A developmental perspective on paragangliar tumorigenesis. *Cancers (Basel)* 11. doi: 10.3390/cancers11030273
2. Florio R, De Lellis L, Veschi S, **Verginelli F**, di Giacomo V, Gallorini M, Perconti S, Sanna M, Mariani-Costantini R, Natale A, Cataldi A, Cama A (2018) Effects of dichloroacetate as single agent or in combination with GW6471 and metformin in paraganglioma cells. *Sci Rep* 8. doi: 10.1038/s41598-018-31797-5
3. **Verginelli F**, Perconti S, Vespa S, Schiavi F, Prasad SC, Lanuti P, Cama A, Tramontana L, Esposito DL, Guarnieri S, Lotti LV, Mariani-Costantini R (2018) Paragangliomas arise through an autonomous vasculo-angio-neurogenic program inhibited by imatinib. *Acta Neuropathol* 135:779–798. doi: 10.1007/s00401-017-1799-2
4. Florio R, De Lellis L, Di Giacomo V, Di Marcantonio MC, Cristiano L, Basile M, **Verginelli F**, Verzilli D, Ammazalorso A, Prasad SC, Mincione G, Cama A (2017) Effects of PPAR α inhibition in head and neck paraganglioma cells. *PLoS One* 12. doi: 10.1371/journal.pone.0178995
5. Cama A, **Verginelli F**, Lotti LV, Napolitano F, Morgano A, D'Orazio A, Vacca M, Perconti S, Pepe F, Romani F, Sanna M, Mariani-Costantini R (2013) Integrative genetic, epigenetic and pathological analysis of paraganglioma reveals complex dysregulation of NOTCH signaling. *Acta Neuropathol* 126:575–594. doi: 10.1007/s00401-013-1165-y
6. Pompilio A, Pomponio S, Crocetta V, Gherardi G, **Verginelli F**, Fiscarelli E, Dicuonzo G, Savini V, D'Antonio D, Di Bonaventura G (2011) Phenotypic and genotypic characterization of *Stenotrophomonas maltophilia* isolates from patients with cystic fibrosis: Genome diversity, biofilm formation, and virulence. *BMC Microbiol* 11. doi: 10.1186/1471-2180-11-159
7. **Verginelli F**, Bishehsari F, Napolitano F, Mahdavinia M, Cama A, Malekzadeh R, Miele G, Raiconi G, Tagliaferri R, Mariani-Costantini R (2009) Transitions at CpG dinucleotides, geographic clustering of TP53 mutations and food availability patterns in colorectal cancer. *PLoS One* 4. doi: 10.1371/journal.pone.0006824
8. Rigoli L, Di Bella C, **Verginelli F**, Falchetti M, Bersiga A, Rocco A, Nardone G, Mariani-Costantini R, Caruso RA (2008) Histological heterogeneity and somatic mtDNA mutations in gastric intraepithelial neoplasia. *Mod Pathol* 21:733–741. doi: 10.1038/modpathol.2008.58
9. **Verginelli F**, Capelli C, Coia V, Musiani M, Falchetti M, Ottini L, Palmirotta R, Tagliacozzo A, De Grossi Mazzorin I, Mariani-Costantini R (2005) Mitochondrial DNA from prehistoric canids highlights relationships between dogs and South-East European wolves. *Mol Biol Evol* 22:2541–2551. doi: 10.1093/molbev/msi248

10. Destro-Bisol G, Donati F, Coia V, Boschi I, **Verginelli F**, Caglià A, Tofanelli S, Spedini G, Capelli C (2004) Variation of female and male lineages in sub-Saharan populations: The importance of sociocultural factors. *Mol Biol Evol* 21:1673–1682. doi: 10.1093/molbev/msh186

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1. Toracchio S, Caruso RA, Perconti S, Rigoli L, Betri E, Neri M, **Verginelli F**, Mariani-Costantini R. (2020) Evolutionarily-Related *Helicobacter pylori* Genotypes and Gastric Intraepithelial Neoplasia in a High-Risk Area of Northern Italy. *Microorganisms* 8(3). pii: E324. doi: 10.3390/microorganisms8030324.
2. Florio R, Veschi S, di Giacomo V, Pagotto S, Carradori S, **Verginelli F**, Cirilli R, Casulli A, Grassadonia A, Tinari N, Cataldi A, Amoroso R, Cama A, De Lellis L. (2019) The Benzimidazole-Based Anthelmintic Parbendazole: A Repurposed Drug Candidate That Synergizes with Gemcitabine in Pancreatic Cancer. *Cancers (Basel)* 11(12). pii: E2042. doi:10.3390/cancers11122042
3. Cirone M, Lotti LV, Granato M, Renzo L Di, Biunno I, Cattaneo M, **Verginelli F**, Vespa S, Davies D, Wells V, Mariani-Costantini R, Mallucci L (2019) Sourcing the immune system to induce immunogenic cell death in Kras-colorectal cancer cells. *Br J Cancer* 1–8. doi: 10.1038/s41416-019-0561-z
4. Giampietro L, Laghezza A, Cerchia C, Florio R, Recinella L, Capone F, Ammazalorso A, Bruno I, De Filippis B, Fantacuzzi M, Ferrante C, Maccallini C, Tortorella P, **Verginelli F**, Brunetti L, Cama A, Amoroso R, Loiodice F, Lavecchia (2019) Novel Phenyl diazenyl Fibrate Analogues as PPAR α/δ Pan-Agonists for the Amelioration of Metabolic Syndrome. *ACS Med Chem Lett* 10:545–551. doi: 10.1021/acsmchemlett.8b00574
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6. Lotti LV, Vespa S, Pantalone MR, Perconti S, Esposito DL, Visone R, Veronese A, Paties CT, Sanna M, **Verginelli F**, Naclér CS, Mariani-Costantini R (2019) A developmental perspective on paragangliar tumorigenesis. *Cancers (Basel)* 11. doi: 10.3390/cancers11030273
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8. Pompilio A, Galardi G, Gherardi G, **Verginelli F**, Geminiani C, Piloni AP, Catalanotti P, Di Bonaventura G (2018) Infection of recurrent calcaneal ulcer caused by a biofilm-producer *Myroides odoratimimus* strain. *Folia Microbiol (Praha)* 63:203–207. doi: 10.1007/s12223-017-0552-5
9. **Verginelli F**, Perconti S, Vespa S, Schiavi F, Prasad SC, Lanuti P, Cama A, Tramontana L, Esposito DL, Guarnieri S, Lotti LV, Mariani-Costantini R (2018) Paragangliomas arise through an autonomous vasculo-angio-neurogenic program inhibited by imatinib. *Acta Neuropathol* 135:779–798. doi: 10.1007/s00401-017-1799-2
10. Ammazalorso A, De Lellis L, Florio R, Bruno I, De Filippis B, Fantacuzzi M, Giampietro L, Maccallini C, Perconti S, **Verginelli F**, Cama A, Amoroso R (2017) Cytotoxic effect of a family of peroxisome proliferator-activated receptor antagonists in colorectal and pancreatic cancer cell lines. *Chem Biol Drug Des* 90:1029–1035. doi: 10.1111/cbdd.13026
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