

CURRICULUM VITAE

Name and Surname: Federica Laudisi

Date and place of birth: 15th October 1983, Rome, Italy

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Nationality: Italian

Work experience:

- **01/2015-today:** Research scientist, University of Rome “Tor Vergata”, Rome, Italy. Supervisor: Prof. Giovanni Monteleone. Research focus: Mucosal Immunology, Inflammatory Bowel Diseases.
- **02/2014-12/2014:** Post-doc, Charité–Universitätsmedizin, Berlin, Germany. Supervisor: Dr. Christina E. Zielinski. Research focus: Human T cell biology.
- **01/2011-01/2014:** Post-doc, Singapore Immunology Network (SIgN), A*STAR. Singapore. Supervisor: Dr. Alessandra Mortellaro. Research focus: Inflammasome biology.

Education:

- **11/2007-03/2011:** PhD in Immunological Sciences, University of Rome “La Sapienza” (Italy), achieved defending the thesis “New Insights into Immune Regulation: PARP-1 Controls the Development of Regulatory T Cells”. Supervisor: Dr. Claudio Pioli.
- **10/2002-07/2007:** Academic degree in Molecular and Cellular Biology, University of Rome Tor Vergata, Rome, Italy, achieved with the maximum of points (110 out of 110) and *cum laude* honours defending the thesis “Regulation of the immune response: a role for PARP-1 in regulatory T cell development”. Supervisor: Dr. Claudio Pioli.

Awards:

- **2019:** Best oral presentation for the session “Lower GI 1”, abstract title: Regulation of colon carcinogenesis by the anti-helminth drug Rafoxanide”, 25th National Congress of Digestive Diseases, Roma, Italy, March 27-30, 2019.
- **2018:** EFIS-EJI Travel Grant to attend 5th European Congress of Immunology (ECI), Amsterdam, NL, September 2-5, 2018.
- **2018:** SIGE Free Registration Grant to attend 24th National Congress of Digestive Diseases, Roma, Italy, March 21-24, 2018.
- **2017:** SIGE Free Registration Grant to attend 23rd National Congress of Digestive Diseases, Bologna, Italy, March 29th–April 1st, 2017.
- **2016:** SIGE Free Registration Grant to attend 22nd National Congress of Digestive Diseases, Naples, Italy, February 24-27, 2016.
- **2015:** SIGE Free Registration Grant to attend 21st National Congress of Digestive Diseases, Bologna, Italy, March 25-28, 2015.
- **2013:** SIICA Travel Bursary to attend 15th International Congress of Immunology (ICI), Milan, Italy, August 22-27, 2013.
- **2012:** NIF Free Registration Grant to attend 2nd IFRc-SigN (NIF) Winter School in Advanced Immunology, Singapore, January 20-25, 2013.
- **2012:** ECI Special Overseas Travel Award to attend 3rd European Congress of Immunology (ECI), Glasgow, UK, September 5-8, 2012.
- **2010:** Efis Free Registration Grant to attend 1st EFIS-EJI Intensive Educational Course in Clinical Immunology, Paris, France, December 1-4, 2010.

- **2010:** ICI Travel Bursary to attend 14th International Congress of Immunology (ICI), Kobe, Japan, August 22-27, 2010.
- **2010:** BEMS Student Travel Grant to attend 32nd Annual Meeting the Bioelectromagnetics Society (BEMS), Seoul, South Korea, June 14-18, 2010.
- **2010:** EAACI Scholarship to attend 8th EAACI-GA²LEN-Immunology Winter School, Grainau, Germany, February 11-14, 2010.
- **2009:** Efis Travel Grant to attend 2nd European Congress of Immunology (ECI), Berlin, Germany, September 13-16, 2009.
- **2008:** “Sebastiano and Rita Raeli” prize for the University course.

Publications:

1. Eleonora Franzè, Antonio Di Grazia, Giuseppe S. Sica, Livia Biancone, Federica Laudisi, Giovanni Monteleone. **Interleukin-34 enhances the tumor promoting function of colorectal cancer-associated fibroblasts.** *Cancers (Basel)*. 2020 Nov 27;12(12):E3537. doi: 10.3390/cancers12123537.
2. Eleonora Franzè, Federica Laudisi, Antonio Di Grazia, Martin Marônek, Vittoria Bellato, Giuseppe S. Sica, Giovanni Monteleone. **Macrophages produce and functionally respond to interleukin-34 in colon cancer.** *Cell Death Discov*. 2020 Nov 5;6(1):117. doi: 10.1038/s41420-020-00350-7.
3. Antonio Di Grazia, Irene Marafini, Giorgia Pedini, Davide Di Fusco, Federica Laudisi, Vincenzo Dinallo, Eleonora Rosina, Carmine Stolfi, Eleonora Franzè, Pierpaolo Sileri, Giuseppe S. Sica, Giovanni Monteleone, Claudia Bagni, Ivan Monteleone. **The Fragile X Mental Retardation Protein regulates RIP1K and colorectal cancer resistance to necroptosis.** *CMGH* 2020 Oct 19:S2352-345X(20)30172-7. doi: 10.1016/j.jcmgh.2020.10.009.
4. Rosanna Pinto, Manolo Sambucci, Federica Laudisi, Francesca Nasta, Rosella Lodato, Pierluigi Altavista, Giorgio Alfonso Lovisolo, Carmela Marino, Claudio Pioli. **Re to Wi-Fi is an important threat to human health, Environ. Research 164: 405, 2018.** *Environ Res*. 2020, 191, 110138. doi: 10.1016/j.envres.2020.110138.
5. Federica Laudisi, Antonio Di Grazia, Martin Marônek, Giovanni Monteleone, Carmine Stolfi. **Repositioning of anthelmintic drugs in the treatment of gastrointestinal cancers.** *Int J Mol Sci*. 2020 Jul 13;21(14):E4957. doi: 10.3390/ijms21144957.
6. Antonio Di Grazia¹, Federica Laudisi¹, Davide Di Fusco, Eleonora Franzè, Angela Ortenzi, Ivan Monteleone, Giovanni Monteleone, Carmine Stolfi. **Rafoxanide induces immunogenic death of colorectal cancer cells.** *Cancers (Basel)*. 2020 May 21;12(5):E1314. doi: 10.3390/cancers12051314.
7. Giovanni Monteleone, Eleonora Franzè, Federica Laudisi. **Expression of the receptors for SARS-COV2 in the gut of patients with inflammatory bowel disease.** *Gut Liver*. 2020 Jun 3. doi: 10.5009/gnl20112.
8. Eleonora Franzè, Vincenzo Dinallo, Federica Laudisi, Antonio Di Grazia, Davide Di Fusco, Alfredo Colantoni, Angela Ortenzi, Paolo Giuffrida, Sara Di Carlo, Giuseppe S. Sica, Antonio Di Sabatino, Giovanni Monteleone. **Interleukin-34 Stimulates Gut Fibroblasts to Produce Collagen Synthesis.** *J Crohns Colitis*. 2020 Apr 9. pii: jjaa073. doi: 10.1093/ecco-jcc/jjaa073.
9. Kilian Schober, Manolo Sambucci, Elena Patzer Gwendolyn, Federica Laudisi. **Young immunologists of Europe, unite!** *Eur J Immunol*. 2020 Apr;50(4):480-483. doi: 10.1002/eji.202070045.
10. Davide Di Fusco, Carmine Stolfi, Antonio Di Grazia, Vincenzo Dinallo, Federica Laudisi, Marafini I., Alfredo Colantoni, Ivan Monteleone; Carmine Stolfi; Giovanni Monteleone. **Albendazole negatively regulates keratinocyte proliferation.** *Clin Sci (Lond)*. 2020 Apr 1. pii: CS20191215. doi: 10.1042/CS20191215.
11. Patrizio Scarozza, Irene Marafini, Federica Laudisi, Edoardo Troncone, Schmitt H., Stefania Costa, Marco Vincenzo Lenti, Irene Rocchetti, Elena De Cristofaro, Silvia Salvatori, Ludovica Frezzati, Antonio Di Sabatino, Raja Atreya, Markus F. Neurath, Emma Calabrese, Giovanni Monteleone. **Extent of mucosal inflammation in ulcerative colitis influences the clinical remission induced by Vedolizumab.** *J Clin Med*. 2020 Feb 1;9(2). pii: E385. doi: 10.3390/jcm9020385.

12. Federica Laudisi, Carmine Stolfi, Giovanni Monteleone **Impact of food additives on gut homeostasis.** *Nutrients*. 2019 Oct 1;11(10). pii: E2334. doi: 10.3390/nu11102334.
13. Eleonora Franzè, Ivan Monteleone, Federica Laudisi, Angelamaria Rizzo, Vincenzo Dinallo, Davide Di Fusco, Alfredo Colantoni, Angela Ortenzi, Paolo Giuffrida, Sara Di Carlo, Giuseppe S. Sica, Antonio Di Sabatino, Giovanni Monteleone. **Cadherin-11 is a regulator of intestinal fibrosis.** *J Crohns Colitis*. 2019 Aug 23. pii: jjz147. doi: 10.1093/ecco-jcc/jjz147.
14. Federica Laudisi¹; Antonio Di Grazia¹; Veronica De Simone; Fabio Cherubini; Alfredo Colantoni; Angela Ortenzi; Eleonora Franzè; Vincenzo Dinallo; Davide Di Fusco; Ivan Monteleone; Eric R Fearon; Giovanni Monteleone; Carmine Stolfi. **Induction of endoplasmic reticulum stress and inhibition of colon carcinogenesis by the anti-helminthic drug rafoxanide.** *Cancer Lett*. 2019 Oct 10;462:1-11. doi: 10.1016/j.canlet.2019.07.014.
15. Federica Laudisi¹, Fabio Cherubini¹, Antonio Di Grazia, Vincenzo Dinallo, Davide Di Fusco, Angela Ortenzi, Ivan Monteleone, Naoya Sakamoto, Giovanni Monteleone and Carmine Stolfi. **Progranulin sustains STAT3 hyper-activation and oncogenic function in colorectal cancer cells** *Mol Oncol*. 2019 Jul 30. doi: 10.1002/1878-0261.12552.
16. Vincenzo Dinallo, Irene Marafini, Davide Di Fusco, Antonio Di Grazia, Federica Laudisi, Rami Dwairi, Omero A. Paoluzi, Giovanni Monteleone and Ivan Monteleone. **Protective effects of Aryl hydrocarbon Receptor signalling in celiac disease mucosa and in poly I:C-induced small intestinal atrophy mouse model.** *Front Immunol* 2019 Jan 14; doi: 10.3389/fimmu.2019.00091.
17. Vincenzo Dinallo, Irene Marafini, Davide Di Fusco, Federica Laudisi, Eleonora Franzè, Antonio Di Grazia, Flavio Caprioli, Carmine Stolfi, Ivan Monteleone and Giovanni Monteleone. **Neutrophil extracellular traps sustain inflammatory signals in ulcerative colitis.** *J Crohns Colitis*. 2019 Feb 3. doi: 10.1093/ecco-jcc/jjy215.
18. Federica Laudisi, Davide Di Fusco, Vincenzo Dinallo, Carmine Stolfi, Antonio Di Grazia, Irene Marafini, Alfredo Colantoni, Angela Ortenzi, Claudia Alteri, Francesca Guerrieri, Maria Mavilio, Francesca Ceccherini-Silberstein, Massimo Federici, Thomas T. MacDonald, Ivan Monteleone, Giovanni Monteleone. **The food additive maltodextrin promotes endoplasmic reticulum stress-driven mucus depletion and exacerbates intestinal inflammation.** *Cell Mol Gastroenterol Hepatol*. 2018 Sep 11;7(2):457-473. doi: 10.1016/j.jcmgh.2018.09.002
19. Federica Laudisi, Fabio Cherubini, Giovanni Monteleone, Carmine Stolfi. **Stat3 interactors as potential therapeutic targets for cancer treatment.** *Int. J. Mol. Sci.* 2018, 19(6), 1787; <https://doi.org/10.3390/ijms19061787>
20. Davide Di Fusco, Vincenzo Dinallo, Ivan Monteleone, Federica Laudisi, Irene Marafini, Eleonora Franzè, Antonio Di Grazia, Rami Dwairi, Alfredo Colantoni, Angela Ortenzi, Carmine Stolfi, Giovanni Monteleone. **Metformin inhibits inflammatory signals in the gut by controlling AMPK and p38 MAP kinase activation.** *Clin Sci (Lond)*. 2018 Jun 12;132(11):1155-1168. doi: 10.1042/CS20180167. Print 2018 Jun 15.
21. Maurizio Vacca, Lia Paola Zambetti, Julia Bohme, Hanif Javanmard Khameneh, Bhairav Paleja, Federica Laudisi, Adrian WS Ho, Kurt Neo, Keith Weng Kit Leong, Mardiana Marzuki, Bernett Lee, Michael Poidinger, Laura Santambrogio, Liana Tsenova, Francesca Zolezzi, Gennaro De Libero, Amit Singhal, Alessandra Mortellaro. **Nlrp10 enhances the Th1 immune response to bacterial pathogens via dendritic-cell mediated IL-12 release.** *Front Immunol*. 2017 Nov 2;8:1462. doi: 10.3389/fimmu.2017.01462
22. Davide Di Fusco, Federica Laudisi, Vincenzo Dinallo, Ivan Monteleone, Antonio Di Grazia, Irene Marafini, Edoardo Troncone, Alfredo Colantoni, Angela Ortenzi, Carmine Stolfi, Mauro Picardo, Giovanni Monteleone. **Smad7 positively regulates keratinocyte proliferation in psoriasis.** *Br J Dermatol*. 2017 Jun 5. doi: 10.1111/bjd.15703.
23. Veronica De Simone, Gerolamo Bevivino, Silvia Sedda, Roberta Izzo, Federica Laudisi, Vincenzo Dinallo, Eleonora Franzè, Alfredo Colantoni, Angela Ortenzi, Silvia Salvatori, Piero Rossi, Giuseppe Sica, Massimo Fantini, Carmine Stolfi and Giovanni Monteleone. **Smad7 knockdown activates protein kinase RNA-**

associated eIF2 α pathway leading to colon cancer cell death. *Cell Death Dis.* 2017 Mar 16;8(3):e2681. doi: 10.1038/cddis.2017.103.

24. Irene Marafini, Ivan Monteleone, Davide Di Fusco, Veronica De Simone, Vincenzo Dinallo, Federica Laudisi, Massimo Claudio Fantini, Antonio Di Sabatino, Francesco Pallone, Giovanni Monteleone. **CCL20 is negatively regulated by TGF-1 β in intestinal epithelial cells and reduced in Crohn's Disease patients with a successful response to mongersen, a smad7 antisense oligonucleotide.** *J Crohns Colitis.* 2017 May 1;11(5):603-609. doi: 10.1093/ecco-jcc/jjw191.
25. ¹Hanif Javanmard Khameneh, ¹Adrian WS Ho, ¹Federica Laudisi, Heidi Derks, Matheswaran Kandasamy, Gim Gee Teng, Baalalsubramanian Sivasankar, Alessandra Mortellaro. **C5a regulates IL-1 β production and leukocyte recruitment in a murine model of gout.** *Front. Pharmacol.*, 2017 Jan 23. <https://doi.org/10.3389/fphar.2017.00010>
26. Ivan Monteleone, Irene Marafini, Vincenzo Dinallo, Davide Di Fusco, Edoardo Troncone, Francesca Zorzi, Federica Laudisi, Giovanni Monteleone. **Sodium chloride-enriched diet enhances inflammatory cytokine production and exacerbates experimental colitis in mice.** *J Crohn's Colitis.* 2016 Jul 29. pii: jjw139.
27. Federica Laudisi, Vincenzo Dinallo, Davide Di Fusco, Giovanni Monteleone. **Smad7 and its potential as therapeutic target in inflammatory bowel diseases.** *Curr Drug Metab.* 2016;17(3):303-6
28. Eleonora Franzè, Ivan Monteleone, Maria Laura Cupi, Pamela Mancia, Flavio Caprioli, Irene Marafini, Alfredo Colantoni, Angela Orteni, Federica Laudisi, Giuseppe Sica, Pier Paolo Sileri, Francesco Pallone, Giovanni Monteleone. **Interleukin-34 sustains inflammatory pathways in the gut.** *Clin Sci (Lond).* 2015 Aug;129(3):271-80. doi: 10.1042/CS20150132.
29. Ling Li, David Ng, Way-Champ Mah, Francisca Almeida, Siti Aishah Rahmat, Vinay Kumar Rao, Shi Chi Leow, Federica Laudisi, Meng Teng Peh, Amanda Goh, John Lim, Graham Wright, Alessandra Mortellaro, Reshma Taneja, Florent Ginhoux, Caroline Lee, Philip K Moore, David Lane. **A unique role for p53 in the regulation of M2 macrophage polarization.** *Cell Death Diff.* 2014 Dec 19. doi: 10.1038/cdd.2014.212.
30. Federica Laudisi, Elena Viganò, Alessandra Mortellaro. **Research Highlight: Tyrosine kinases: the molecular switch for inflammasome activation.** *Cell Mol Immunol.* 11(2):129-31, 2014.
31. Manolo Sambucci, Federica Laudisi, Flavia Novelli, Elisabetta Bennici, Maria Manuela Rosado, Claudio Pioli. **Effects of PARP-1 deficiency on Th1 and Th2 cell differentiation.** *The Scientific World Journal*, vol. 2013, Article ID 375024, 8 pages, 2013.
32. Federica Laudisi, Roberto Spreafico, Maximilien Evrard, Timothy R. Hughes, Barbara Mandriani, Matheswaran Kandasamy, B. Paul Morgan, Sivasankar Baalalsubramanian, Alessandra Mortellaro. **Cutting edge: the NLRP3 inflammasome links complement-mediated inflammation and IL-1 β release.** *J Immunol.* 191(3):1006-10, 2013.
33. Ginevra Licandro, Hwei Ling Khor, Ottavio Beretta, Junyun Lai, Heidi Derks, Federica Laudisi, Cristina Conforti-Andreoni, Hong Liang Qian, Gim Gee Teng, Paola Ricciardi-Castagnoli, Alessandra Mortellaro. **The NLRP3 inflammasome affects DNA damage responses after oxidative and genotoxic stress in dendritic cells.** *Eur J Immunol.* 43(8):2126-37, 2013.
34. Federica Laudisi, Manolo Sambucci, Francesca Nasta, Rosanna Pinto, Rossella Lodato, Pierluigi Altavista, Giorgio A. Lovisolo, Carmela Marino, Claudio Pioli. **Prenatal exposure to radiofrequencies: effects of WiFi signals on thymocyte development and peripheral T cell compartment in an animal model.** *Bioelectromagnetics*, 33(8):652-61, 2012.
35. Lia P. Zambetti¹, Federica Laudisi¹, Ginevra Licandro, Alessandra Mortellaro. **The rhapsody of NLRPs: master players of inflammation ... and a lot more.** *Immunol. Res.*, 53(1-3):78-90, 2012
36. Manolo Sambucci, Federica Laudisi, Francesca Nasta, Rosanna Pinto, Rossella Lodato, Vanni Lopresto, Pierluigi Altavista, Carmela Marino, Claudio Pioli. **Early life exposure to 2.45GHz WiFi-like signals: effects on development and maturation of the immune system.** *Prog. Biophys. Mol. Biol.* 107(3):393-8, 2011.

37. Federica Laudisi, Manolo Sambucci, Claudio Pioli. **Poly (ADP-Ribose) Polymerase-1 (PARP-1) as immune regulator.** *Endocr. Metab. Immune Disord. Drug. Targets.* 11: 326-333, 2011.
38. Manolo Sambucci, Federica Laudisi, Francesca Nasta, Rosanna Pinto, Rossella Lodato, Pierluigi Altavista, Giorgio A. Lovisolo, Carmela Marino, Claudio Pioli. **Prenatal exposure to non-ionizing radiation: effects of WIFI signals on peripheral B cell compartment and antibody production.** *Radiat. Res.* 174: 732-40, 2010.
39. Francesca Nasta¹, Federica Laudisi¹, Manolo Sambucci, Manuela M. Rosado, Claudio Pioli. **Increased Foxp3⁺ regulatory T cells in Poly(ADP-Ribose) Polymerase-1 deficiency.** *J. Immunol.* 184: 3470-3477, 2010.

¹: co-authors

Conferences attended as invited speaker:

1. *Impact of food additives on gut homeostasis.* Food and Agriculture Organization of the United Nations (FAO) – “Microbiome: the missing link?”. Rome, Italy, 8th July 2020.
2. *Flora batterica residente: ruolo nelle malattie infiammatorie croniche intestinali.* Malattie infiammatorie croniche intestinali: prospettive terapeutiche - Policlinico Tor Vergata. Rome, Italy, 17th September 2019.
3. *The contribution of food additives in the pathogenesis of intestinal damage.* Inflammation Research in Gastroenterology (IRG), Rome, Italy, 16th November 2018.
4. *Dieta, additivi alimentari ed implicazione per l'infiammazione intestinale.* CAMPUS AGGEI “RISING STARS”, Milan, Italy, November 24-25, 2017.
5. *Immunologic implications linking skin to gastro-intestinal system: how inflammatory bowel diseases could “comorbidying” psoriasis.* PSOFUTURE: New directions from the Eternal City, Rome, Italy, April 9-11, 2015.
6. *Regulatory Th17 cells.* 42. Kongress der Deutschen Gesellschaft für Rheumatologie (DGRh), Düsseldorf, Germany, September 17-20, 2014.
7. *Regulation of pro- and anti-inflammatory human Th17 cell properties.* 9th World Congress on Alternatives and Animal Use in the Life Sciences. Prague, Czech Republic, August 24-28, 2014.

Membership:

- Active member of Italian Immunology, Clinical Immunology and Allergy Society (SIICA) since 2008.
- Junior Faculty member of Italian Immunology, Clinical Immunology and Allergy Society (SIICA) (2018-2021)
- SIICA representative for yEFIS (Young European Federation of Immunological Societies Network), since March 2020.

Reviewer and Editorial experience:

- Reviewer for *Cancers, Clinical Science, Cells, Frontiers in Immunology, Frontiers in Pharmacology, International Journal of Molecular Sciences, Molecular Oncology, Acta Diabetologica, International Journal of Environmental Research and Public Health.*
- Guest Editor of the special issue "Inflammation and Gastrointestinal Cancers: Molecular Mechanisms and Therapies 2.0", section "Molecular Oncology", *International Journal of Molecular Sciences (ISSN 1422-0067)*, December 31, 2021.

- Guest Editor of the joint special issue “Gut dysbiosis: molecular mechanisms and therapies”, *Biomedicines* (ISSN 2227-9059) and *International Journal of Molecular Sciences* (ISSN 1422-0067), October 16, 2021.
- Review Editor on the Editorial Board of “T Cell Biology” (specialty section of *Frontiers in Immunology*, ISSN 1664-3224), since October 13, 2020.
- Guest Editor of the special issue "Inflammation and Gastrointestinal Cancers: Molecular Mechanisms and Therapies 1.0", section "Molecular Oncology", *International Journal of Molecular Sciences*, ISSN 1422-0067), August 31, 2020.