

Simone Filosto, Ph.D.

*Research Scientist
Cell and Molecular Biologist*



Mobile phone +44 (0)747 5515816

E-mail sfilosto@gmail.com (preferred contact method)

- Strong Expertise in Cell and Molecular Biology
- PhD in Cell and Developmental Biology
- 6 years of post-doctoral training in Lung Diseases and Oncology.
- 13 years of Research experience in Europe and USA in Academia and Industry settings
- Drug discovery in preclinical models
- Assay development for target, small molecules and biomarker validation
- Project management and supervisory experience
- Hands-on experience with many research methods (see technical skills)
- Outstanding publication record
- Driven, accountable, teamplayer, detail-oriented, strong communicator and leader.

WORK EXPERIENCE

Senior Scientific Officer in Cancer Therapeutics, Current role since Dec 2015

Company: **The Institute of Cancer Research (ICR), UK**

Area of interest:

- Cancer Biology
- Drug discovery and Biomarkers in pre-clinical models
- Cellular assay development for target identification and validation

Activities and responsibilities:

- Laboratory supervisor, target and apoptosis team
- Hit-to-lead and lead-optimization small molecule compound validation
- Presentation of data to cancer therapeutics division meetings
- Research advisor for junior fellows (PhD Students and postdocs)

Major Achievements:

- Qualification of PD Biomarker for a pre-clinical small molecule inhibitor of the spindle assembly checkpoint
- Validation of small molecule inhibitors of HSET kinesin activity
- Identification of HSET function biomarker via analyses of transcriptomics and proteomics data
- Set-up of cell death and proliferation assays to assess inhibitors' IC50
- Set-up of high-content microscopy phenotypic assay to measure multipolar mitosis

Research Associate and Affiliate Researcher in Oncology, Mar 2014 – Feb 2017

Company: **King's College London, UK**

Area of interest:

- Cancer Biology and Therapeutics
- The role and molecular mechanisms of the oncogene PIM1 kinase in breast cancer

Activities and Responsibilities:

- Research Project management
- Data collection, analysis and interpretation
- Graduate student advisor

Major Achievements:

- One manuscript published in Nature Medicine Journal, establishing the role of PIM1 in triple negative breast cancer
- Developed lentiviral constructs to assess the role of PIM1 kinase activity in cancer cell death and proliferation.
- Established 3D cell culture models (Spheroid formation in Matrigel and in Soft Agarose).
- One graduate student supported through PhD dissertation

Research Scientist in lung infection and inflammation, Jan - Dec 2015

Company: **Retroscreen Virology (UK) / hVIVO Services Ltd**

Area of interest:

- Novel therapeutics and biomarkers in common Lung infections
- Immunology
- Cellular assay development.

Activities and Responsibilities:

- Setting up the R&D laboratory
- Developing the *in vitro* and *ex vivo* assays for target and biomarker validation
- Assisting in project management

Major Achievements:

- Establishment of the R&D facility and development of all pertinent standard operating procedures (SOPs), COSHH, risk assessments and GCP compliance
- Identification of a number of novel immuno-modulatory targets from transcriptomic and computational pathway analysis (Ingenuity Pathway Analysis)
- Set-up of MSD-based assays to measure inflammatory markers (cytokines and chemokines)
- Development of a phenotypic assay in high-content microscopy to assess injury of endothelial cell monolayer (using both HUVEC primary cell and cell lines)
- Qualification of two lead small molecule compounds in cellular models

Post-doctoral Fellow and Principal Investigator in Lung Diseases, Jan 2009 - Mar 2014

Company: **University of California Davis, USA**

Area of interest:

- Lung Cell and Molecular Biology
- Tobacco smoke-associated lung diseases
- The role and molecular mechanisms of nSMase2 in lung injury and fibrosis
- Mechanisms of resistance to EGFR-targeted therapy in Lung Cancer
- Cell Signaling and biochemistry
- Sphingolipids in lung diseases

Activities and Responsibilities:

- Laboratory head
- Protocol design, data analysis and interpretation
- Mentoring graduate and undergraduate students, technicians and junior postdocs.
- Presentation of data to groups meetings and international conferences

Major Achievements:

- 6 first author research papers, two reviews and two book chapters
- Established the role of the neutral Sphingomyelinase 2 in Lung Injury Diseases
- Characterized the structure/function alteration of EGF Receptor in smokers' lung epithelia, elucidating resistance to targeted therapy
- Principal Investigator (\$117,000 research grant)
- Key researcher (\$1,950,000 research grants)
- UCD 2011 Internal Medicine award for excellence in biomedical research

Educational tutor of Life Sciences, Oct 2007 - Oct 2008

Company: **University of Palermo, Italy**

Area of Interest:

- Teaching and mentoring (life science subjects)

Activities and Responsibilities:

- Tutoring students on study methods and biological subjects

Major Achievement:

- Supported over 20 students in passing their academic exams

Internship in Cell Biology, Apr 2004 - July 2005

Company: **University of Palermo, Italy**

Area of Interest:

- Cell and Developmental Biology

Activities and Responsibilities:

- Experiment design and execution
- General Laboratory maintenance
- Assisting with Manuscript writing
- Assisting with SOP writing

Major Achievements:

- Graduated summa cum laude
- Presentation of research findings to group meetings and national conferences

OTHER AFFILIATIONS

- 2009-2017. American Thoracic Society (ATS)
- 2015-2017. Affiliate Researcher at KCL, UK
- 2014-2015. Visiting Research Associate at UC Davis School of Medicine (USA)
- 2015-2016. The society of Biology, UK
- 2009-2012. American Society for Cell Biology (ASCB)
- 2014-2017. *Ad hoc* Scientific reviewer, Antioxidants and Redox Signaling (ARS) journal
- 2012-2017. *Ad hoc* Scientific reviewer, PLoS ONE Journal
- 2013-2017. *Ad hoc* Scientific reviewer, Cell Stress and Chaperones
- 2013-2016. *Ad hoc* Scientific reviewer, Autophagy
- 2012-2016. *Ad hoc* Scientific reviewer, FEBS Letters Journal
- 2012-2016. *Ad hoc* Scientific reviewer, Journal Prep (www.journalprep.com)

HONORS AND AWARDS

- 2011. Richard C. Woodard Postdoctoral Scholar Research Award - UC Davis School of Medicine
- 2007. Speaker for the council of Cell and Develop. Biology Dept. at University of Palermo, Italy
- 2007. Paper selected for front page indexing by the journal Cell Stress and Chaperones
- 2005. Graduated with Honors

EDUCATION

Ph.D. in Cell and Developmental Biology, Jan 2006 – Dec 2008

Institute: **University of Palermo, Italy**

Area of Interest:

- Cell and Developmental Biology

- Toxicology
 - Mechanisms of heavy metals-induced cell death in sea urchin embryos
- Activities and Responsibilities:
- Experiment design and execution; data analysis
 - Laboratory management
 - Presentation of data to international congresses and group meetings
 - 3 Research papers (1 as first author)
 - Principal Investigator (5000 Euro research grant)
 - Key researcher (300,000 Euro research grant)
 - Ph.D. student spokesperson at Cell Biology Department
 - Scientific paper selected for front page indexing by the journal Cell Stress and Chaperones

Master's Degree in Natural Sciences, Sep 1999 - Jul 2005

Institute: **University of Palermo (Italy)**

Area of Interest:

- Biology
- Zoology and Botany
- Ecology and Toxicology
- Geology

Activities and Responsibilities:

- Internship and experimental thesis in Cell Biology
- Graduated with Honors (Magna cum Laude)

ADDITIONAL TRAINING

- 2016. Statistics for researchers
- 2016. Assay development in drug discovery
- 2015. Applied Biosystem Quantstudio7/ qPCR training
- 2015. QIACUBE (QIAGEN) training.
- 2015. RVL Basic good clinical practice
- 2015. Research and human tissue legislation (HTA compliance)
- 2014. CITI Good Clinical Practice (GCP)
- 2009-2014. ICH/GCP Refresher (on an annual basis)
- 2009-2014. Biomedical Research Basic/Refresher (on an annual basis)
- 2010. Animal Care and Use
- 2009. Biological safety/Medical waste management
- 2009. Blood borne Pathogen Awareness
- 2009. Safe Handling of rDNA Materials
- 2009. Health Physics Seminar

TECHNICAL SKILLS

RESEARCH METHODS

- **Cell culture (2D and 3D)**: primary bronchial epithelial cells, skin fibroblasts, endothelial cells, cell lines (A549, HBE1, HCC827, H1650, H1975, NIH-3T3, H3255, SYF, CHO, SKBR3, MEF, LA-4, SUM149, SUM159, MDAMB231, MCF10A, BT474, HCC38, HCC1954, MCF7, T47D, HCC1143, HCC1428 and others).
- **Biochemistry**: Viability assays (e.g. Alamar Blue, SRB, MTT), Western blotting, Immuno-precipitation, affinity purification, IHC, IF and confocal microscopy, high-content imaging (ImagExpress and InCell Analysers), flow cytometry/FACS (Fortessa II), Elisa and MSD assays, biochemical enzymatic assays; cell lipid extraction and analysis; sub-cellular fractionation.

- **Molecular biology:** DNA/RNA isolation (manual and automated systems/ QIACUBE), qRT-PCR (TaqMan and SYBR Green); PCR-based gene expression arrays, vector cloning/ sub-cloning and mutagenesis; transfection and infection (lentiviral) of mammalian cells; DNA editing technologies (TALE and CRISPR-Cas9).
- **In vivo studies:** IACUC documents; supervisor of pre-clinical drug and target validation studies, including tumor xenograft models of breast and lung cancer, transgenic/ inducible models of EGFR-driven lung tumors and cigarette-smoke induced apoptosis and lung injury.
- **Bioinformatics:** Ingenuity pathway analysis (IPA)/ omics data interpretation, STRING Network analysis, Transmart, Immgene, Blast, Primer3, NCBI/PUBMED, SWISS-prot and other web databases.
- **Biostatistics:** direct experience with one and two sample T-Test (paired and un-paired test); ANOVA; Mann-Whitney and Wilcoxon non-parametric tests; non-inferiority and equivalence testing; direct and inverse correlation.
- **Clinical research:** ICH/GCP compliance; IRB document preparation; analysis of human patients' lung biopsies; gene expression analysis (TaqMan-qPCR) from blood samples.

COMPUTER SKILLS

- Microsoft Windows, Mac O.S., Microsoft Office (MS Word, MS Excel, MS Project, MS PowerPoint), Image J, End note, Adobe Illustrator, Adobe Photoshop, Paint Shop Pro, GraphPad PRISM, FlowJo, Diva, Expression Suite (Applied Biosystem), NCSS (statistical analysis software).

RESEARCH GRANTS (FUNDED PROJECTS)

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|---|-----------|
| Cancer Research UK Core Research Institute funding (PI: S. Linardopoulos) “Discovery and Development of Anticancer Drugs” Role: Key Researcher £ 2.5M (Total for 5 years) | 2017-2022 |
| Tobacco Related Disease Research Program TRDRP- 227RT-0090 (PI: T. Goldkorn) “Joint roles of ceramide and Src/EGFR in lung injury and cancer” Role: Key Researcher and Project Consultant \$ 450000 (Total for 4 years) | 2013-2017 |
| TRDRP (CA, USA), ID: 19FT-0061 “Cigarette smoke and lung injury: mechanism of nSMase2 action” Role: Principal Investigator \$ 117255 (Total for 3 years) | 2011-2014 |
| R01HL066189 (PI: T. Goldkorn) National Heart Lung and Blood Institute “Molecular and cellular characterization of sphingomyelinases” Role: Key Researcher \$ 1.5M (Total for 4 years) | 2010-2014 |
| Tobacco Related Disease Research Program TRDRP- 17RT-0131 (PI: T. Goldkorn) “Cigarette smoke injures lung epithelium by activating apoptosis” Role: Key Researcher \$ 500000 (Total for 4 years) | 2008-2012 |
| Pon Ricerca 00/06 (Italy), Prot. 81960 19/Nov/2007, | 2008 |

“Stress response and apoptosis induced by cadmium in sea urchin embryos and larvae”

Role: Principal Investigator

€ 5000 (Total for 1 year)

OTHER GRANT APPLICATION EXPERIENCE (NOT FUNDED)

K01, Mentored Developmental award program,

“Idiopathic pulmonary fibrosis (IPF): the role of nSMase2-induced ceramide generation in lung airway mesenchymal reprogramming”

Role: **Principal Investigator**

PUBLICATION RECORD

RESEARCH PAPERS

- 1) 2016 Braso F, **Filosto S**, Rebecca M, Quist J, Francesch Domenech E, Perdrix Rosell A, Shafat M, Noël E, Plumb DA, Mathew S, Gazinska P, Watkins J, Marra P, Grigoriadis A, Tutt AN. PIM1 kinase regulates cell death, tumor growth and chemotherapy response revealing a novel target in triple-negative breast cancer. **Nature Medicine**. 2016 Nov;22(11):1303-1313
- 2) 2015 Chung S, Vu S, **Filosto S**, Goldkorn T. Src Regulates Cigarette Smoke-induced Ceramide Generation via nSMase2 in the Airway Epithelium. **Am J Respir Cell Mol Biol**. Jun;52(6):738-48.
- 3) 2013 **Filosto S**, Baston D, Chung S, Becker C, Goldkorn T. Src mediates cigarette smoke-induced resistance to tyrosine kinase inhibitors in NSCLC cells. **Molecular Cancer Therapeutics**. Aug;12(8):1579-90).
- 4) 2013 Davis B, Zeki A, Bratt J, Wang L, **Filosto S**, Walby W, Kenyon N, Goldkorn T, Schelegle E, Pinkerton K. Simvastatin inhibits tobacco smoke-induced acute lung inflammation and airway injury: Implications for the Treatment of COPD. **European Respiratory Journal**. Aug;42(2):350-61.
- 5) 2012 **Filosto S**, Becker C, Goldkorn T. Cigarette smoke induces aberrant EGF receptor activation which mediates lung cancer development and resistance to tyrosine kinase inhibitors. **Molecular Cancer Therapeutics**. 11(4):795-804.
- 6) 2012 **Filosto S**, Fry W, Ashfaq M, Goldkorn T. Neutral sphingomyelinase 2 activity and protein stability are modulated by phosphorylation of five conserved serines. **The Journal of Biological Chemistry**. 287(1):514-22.
- 7) 2011 **Filosto S**, Khan E, Tognon E, Becker C, Ashfaq M, Ravid T and Goldkorn T. EGF receptor exposed to oxidative stress acquires abnormal phosphorylation and aberrant activated conformation that impairs canonical dimerization. **PLoS ONE**. 6(8):e23240.
- 8) 2011 **Filosto S**, Castillo S, Danielson A, Franzi L, Khan E, Kenyon N, Last J, Pinkerton K, Tudor R, Goldkorn T. Neutral sphingomyelinase 2: a novel target in cigarette smoke-induced apoptosis and lung injury. **Am J Respir Cell Mol Biol**. 44(3):350-60.
- 9) 2010 **Filosto S**, Fry W, Knowlton AA, Goldkorn T. Neutral sphingomyelinase 2 (nSMase2) is a phosphoprotein regulated by Calcineurin (PP2B). **The Journal of Biological Chemistry**. 285(14): 10213-22
- 10) 2008 **Filosto S.**, Roccheri MC, Bonaventura R, Matranga V. 2008. Environmentally relevant cadmium concentrations affect development and induce apoptosis of *Paracentrotus lividus* larvae cultured in vitro. **Cell Biology and Toxicology**. 24(6): 603-10.
- 11) 2007 Agnello M., **Filosto S**, Scudiero R, Rinaldi AM and Roccheri MC. Cadmium induces apoptotic response in sea urchin embryos. **Cell Stress and Chaperones**. 12 (1): 44-50.
- 12) 2006 Agnello M, **Filosto S**, Scudiero R, Rinaldi AM, Roccheri MC. Cadmium accumulation induces apoptosis in *P. Lividus* embryos. **Caryologia**, 59:403-408.

REVIEWS

- 1) 2014 Goldkorn T, **Filosto S**, Chung S. Comprehensive Invited Review: Lung injury and lung cancer caused by cigarette smoke-induced oxidative stress: molecular mechanisms and therapeutic opportunities. **Antioxidants and Redox Signaling (ARS) journal**. [Epub ahead of print] PMID: 24684526.

- 2) 2010 Goldkorn T, **Filosto** S. Lung Injury and Cancer: Mechanistic Insights into Ceramide and EGFR Signaling Under Cigarette Smoke. **Am J Respir Cell Mol Biol.** 43(3):259-68.

BOOK CHAPTERS

- 1) 2013 Goldkorn T, **Filosto** S, Chung S. Stress-Driven Endocytosis of Tyrosine-Phosphorylated EGFR Leads to Tumorigenesis: The Critical Role of Oxidative Stress. Book title: *Vesicle Trafficking in Cancer*. Springer Science Business Media New York.
- 2) 2013 Goldkorn T, Chung S, **Filosto** S. Lung Cancer and Lung Injury: The Dual Role of Ceramide. Book title: *Sphingolipids in Disease*, Handbook of Experimental Pharmacology 216. Springer-Verlag Wien.

TEACHING ACTIVITIES

- 2017 Hallmarks of Cancer, Journal Club Moderator; The Institute of Cancer Research, Cancer Therapeutics Division (Sutton, UK).
- 2015-2017 Instructor in the Target Discovery and Apoptosis Laboratory (The Institute of Cancer Research, UK) for research methods and laboratory H&S.
- 2013 Invited Lecture on "Pharmacokinetics: what is it? And why does it matter?" Utah State University School of Veterinary Medicine, Logan (UT) June 4th.
- 2011-2013 Teaching assistant and *ad hoc* lecturer for the Howard Hughes Medical Institute (HHMI) training program in "Molecular mechanisms in cancer therapy". UC Davis School of Medicine (CA). This program is intended for outstanding Medical and Graduate students.
- 2009-2013 Referral in the Signal transduction laboratory of Dr. Goldkorn (University of California Davis) for laboratory training and research methods to undergraduate and graduate students, technicians and junior postdocs/ fellows.
- 2007-2008 Educational tutor for the college of sciences (University of Palermo, Italy): providing support in (I) writing Master's thesis, and (II) understanding a variety of subjects, including Cell Biology, Physiology, Genetic, Molecular Biology, Biochemistry and Cell Biotechnology.
- 2007-2008 Teaching assistant for undergraduate/ bachelor classes in Cell Biology and Evolutionary Biology of Vertebrates. University of Palermo (Italy).
- 2004 One-on-one teaching of Organic Chemistry to college students at University of Palermo (Italy).

SUPERVISORY ROLES

- 2014-2017 Project advisor, Nirmesh Patel, BS, PhD candidate, King's College London (UK)
- 2014-2016 Project advisor. Fara Braso, BS, PhD candidate, King's College London (UK)
- 2014-2015 Research advisor. Anna Perdigon, BS, MS Student, King's College London (UK)
- 2012-2014 Research supervisor. Simon Vu, BS, Jr. Specialist, University of California at Davis (USA).
- 2012-2014 Research supervisor. Michelle Soriano, Biochemistry undergraduate Intern, University of California at Davis (CA, USA).
- 2011-2014 Research advisor. Samuel Chung, Pharmacology and toxicology Graduate (Ph.D.) program, University of California at Davis (CA, USA).
- 2011-2013 Project advisor. David Baston, Ph.D., Postdoctoral scholar, University of California, Davis (CA, USA).
- 2012 Research advisor. Alon Mantel, Ph.D., Postdoctoral scholar, University of California, Davis (CA, USA).
- 2012 Research supervisor. Segolene Weller, BS, Volunteer, University of California at Davis (CA, USA).
- 2010-2012 Research supervisor. Cathleen Becker, BS, Jr. Specialist, University of California at Davis (CA, USA).
- 2009-2011 Research supervisor. Majid Ashfaq, BS, Jr. Specialist, University of California at Davis (CA, USA).
- 2009-2010 Research supervisor. Kyle Bardet, Biochemistry undergraduate intern, University of California at Davis (CA, USA).
- 2007-2008 MS thesis and research co-supervisor. CITTINA CITTINI, BS, Biological Sciences Graduate Program, University of Palermo, PA (Italy).
- 2007-2008 MS thesis and research co-supervisor. Gianluca Gabriele, BS, Biological Sciences Graduate Program, University of Palermo, PA (Italy).
- 2006-2007 BS thesis and research co-supervisor. Chiara Scrimali, Biological Sciences undergraduate Program, University of Palermo, PA (Italy).

INVITED SEMINARS

- January 27th 2017. Target ID and drug development (small molecules) in Cancer. Tusk Therapeutics (Stevenage, UK).
- August 19th. 2013. The dual role of ceramide in epithelial cell apoptosis and proliferation. Implication in cigarette smoke-induced lung diseases. Clontech, Mountain View (CA).

- June 3rd 2013. Src and the ceramide generating machinery: dual roles in lung Injury and lung cancer. Utah State University, Logan (UT).
- April 29th, 2013. Lung injury and Lung Cancer: is there a molecular link? Lung Research Day. GBSF, UC Davis CA, USA
- June 14th, 2012. Molecular mechanisms of oxidative stress-induced lung injury and lung cancer during exposure to cigarette smoke: roles of nSMase2/ ceramide generation and EGFR. Department of Environmental Toxicology at UC Davis (CA, USA).

CONFERENCE LECTURES

1. **Filosto S**, Vu S, Santoso M, Chung S, Goldkorn T. Paradigm Shift for nSMase2-Derived Ceramide in the Lung: From Injury to Cancer and Fibrosis. Gordon Conference. Glycolipid and Sphingolipid Biology. Ventura (CA), 2014.
2. **Filosto S**, Fry W, Ashfaq M, Goldkorn T. Neutral sphingomyelinase 2, a novel target in lung injury, is modulated by cigarette smoke-induced phosphorylation. American thoracic society (ATS) international conference, Denver (CO - USA), 15, May 2011.
3. **Filosto S**, Castillo S, Danielson A, Fry W, Franzi L, Khan E, Kenyon N, Last J, Knowlton AA, Pinkerton K, Tuder R, Goldkorn T. The role and molecular mechanism of nSMase2 in lung injury under cigarette smoke. 1^o Lung Research Day. April 14th 2010, GBSF, UC Davis.
4. **Filosto S**, Agnello M, Trinchella F, Chiarelli R, Roccheri. MC. Differences between physiological and induced apoptosis in sea urchin embryos. 2nd International meeting "Cell stress and apoptosis, to Arturo", July 3rd – 4th 2008, Hotel Salerno (SA) Italy.
5. **Filosto S**, Agnello M, Gabriele G, Bonaventura R, Matranga V, Luparello C, Roccheri MC. Cadmium insult and defense mechanisms in *Paracentrotus lividus* embryos and larvae. 5th annual Convention Dept. of Cellular and Developmental Biology, Univ. Palermo, December 21st - 22nd 2007, pp. 13.
6. **Filosto S**, Agnello M, Gabriele G, Bonaventura R, Matranga V, Luparello C, Roccheri MC. Cadmium accumulation induces apoptosis in *Paracentrotus lividus* larvae. IX annual Convention FISV (Italian federation of life sciences), September 26 - 29th 2007, Riva del Garda (Tn), Italy. pp D06.03.

ABSTRACT PRESENTATION/ POSTERS TO CONFERENCES

1. Chung S, Vu S, **Filosto S**, Goldkorn T. Neutral Sphingomyelinase 2 Promotes Cell Proliferation Of Human Airway Epithelial Cells During Chronic Cigarette Smoke Exposure Via Sphingosine-1-Phosphate. ATS May 2016 conference. San Francisco (CA).
2. Chung S, Vu, S, **Filosto S**, Goldkorn T. Neutral Sphingomyelinase 2 promotes cell proliferation of human airway epithelial cells during chronic cigarette smoke exposure via Sphingosine-1-Phosphate. 7th Lung Research Day (2016). UC Davis School of Medicine. Davis (CA) 95616.
3. Braso, **Filosto** et al. PIM1 a novel target in chemotherapy resistant triple negative breast cancer. AACR 2016, New Orleans.
4. **Filosto S**, Vu S, Santoso, N, Chung S, Goldkorn T. Cigarette smoke exposure enhances proliferation of airway epithelial cells via the ceramide-generating machinery; a paradigm shift that underlies a potential link between lung injury and lung cancer. ATS 2014, San Diego.
5. Chung S, **Filosto S**, Vu S, Goldkorn T. Cigarette smoke-induced drug resistant to tyrosine kinase inhibitors is mediated by Src in non-small cell lung cancer cells. ATS 2014, San Diego.
6. **Filosto S**, Chung S, Baston D, Goldkorn T. Neutral sphingomyelinase 2 activity and expression in lung epithelium exposed to cigarette smoke-induced oxidative stress: molecular trigger for lung injury. American thoracic society (ATS) international conference, Philadelphia (USA), May, 2013.
7. Chung S, **Filosto S**, Goldkorn T. Src Activates Neutral Sphingomyelinase 2 (nSMase2) During Cigarette-Smoke Induced Oxidative Stress Via PKC δ And p38 MAPK In Human Lung Epithelial Cells. American thoracic society (ATS) international conference, Philadelphia (USA), May, 2013.
8. **Filosto S**, Becker C, Goldkorn T. A novel post-translational mechanism underlies the EGF Receptor resistance to tyrosine kinase inhibition upon CS exposure of airway epithelial cells. American thoracic society (ATS) international conference, San Francisco (CA - USA), May 18-23, 2012

9. **Filosto S**, Chang S, Goldkorn T. Neutral sphingomyelinase 2 (nSMase2) and lung injury: a phosphorylation-based mechanism controls nSMase2 activity and protein stability in lung epithelial cells exposed to oxidative stress. American thoracic society (ATS) international conference, San Francisco (CA - USA), May 18-23, 2012
10. Chang S, **Filosto S**, Goldkorn T. Neutral Sphingomyelinase 2 (nSMase2) activation under H₂O₂ is PKC δ - and Src-dependent. American thoracic society (ATS) international conference, San Francisco (CA - USA), May 18-23, 2012
11. **Filosto S**, Chung S, Goldkorn T. Neutral sphingomyelinase2 is a novel target in cigarette smoke-induced lung injury; insights into molecular mechanisms controlling its activity and protein stability. TRDRP conference, Sacramento (CA - USA) April 10 - 12, 2012
12. Goldkorn T, **Filosto S**. Cigarette smoke causes aberrant activation of EGF Receptor and resistance to tyrosine kinase inhibitors. Cell Signaling Networks 2011, Mexico, Yucatán, Mérida 22-27 October 2011.
13. **Filosto S**, Goldkorn T. Oxidative stress regulates neutral sphingomyelinase 2 activity and protein expression by modulating its phosphorylation. Cell Signaling Networks 2011, Mexico, Yucatán, Mérida 22-27 October 2011.
14. **Filosto S**, Becker C, Ashfaq M, Tognon E, Goldkorn T. Cigarette smoke induces Epidermal Growth Factor Receptor resistance to tyrosine kinase inhibitors. ATS 2011 conference. American thoracic society (ATS) international conference, Denver (CO - USA), 17, May 2011.
15. Goldkorn T, **Filosto S**, Khan E. EGFR becomes resistant to tyrosine kinase inhibition in the presence of cigarette smoke-induced oxidative stress. Cancer Symposium, Cancer Center UC Davis (CA, USA), 10/28/2010.
16. **Filosto S**, Fry W, Knowlton AA, Goldkorn T. Molecular mechanism of neutral sphingomyelinase2 (nSMase2) activation under oxidative stress: a rout for ceramide generation in lung injury. ATS conference, 14-19/05/2010.
17. **Filosto S**, Castillo S, Danielson A, Franzi L, Khan E, Kenyon N, Last J, Pinkerton K, Tuder R, Goldkorn T. Neutral sphingomyelinase 2 (nSMase2): a novel target in cigarette smoke-induced lung injury. ATS conference, 14-19/05/2010.
18. **Filosto S**, Fry W, Knowlton AA, Goldkorn T. Phosphorylation regulates neutral sphingomyelinase2 (nSMase2) function in human airway epithelial cells under oxidative stress. Glycolipid & Sphingolipid Biology Gordon Conference; 7-12/02/2010 Ventura (CA), Marriot Beach Hotel.
19. **Filosto S**, Fry W, Bardet K, Knowlton AA, Goldkorn T. December 2009, nSMase2 is a phosphoprotein activated by oxidative stress via downregulation of calcineurin phosphatase. San Diego (CA) – 49th annual meeting of The American Society for Cell Biology.
20. Agnello M, **Filosto S**, Trinchella F, Roccheri MC. Stress induced and physiological apoptosis during early development of sea urchin *Paracentrotus lividus*. X FISV convention, September 24-27, 2008. Riva del Garda (TN, Italy). pp. D07.05.
21. Pinsino A, Agnello M, **Filosto S**, Bosco L, Roccheri MC. Cadmium and manganese effects on sea urchin embryo development.” 54th G.E.I Convention. June 4-7 2008, Rome.
22. **Filosto S**, Pinsino A, Agnello M, Balistreri R, Roccheri MC Interference of metals in sea urchin embryo development. 5th annual Convention Dept. of Cellular and Developmental Biology, University of Palermo, December 21st – 22nd 2007, pp. 13-14.
23. **Filosto S**, Agnello M, Bosco L, Bonaventura R, Matranga V Roccheri MC. Apoptosi in larve di *Paracentrotus lividus*. 53rd Convention of G.E.I. (Italian Embryologic Group) Giardini – Naxos (ME), Italy, June 6th – 9th 2007. pp 54.
24. Roccheri MC, **Filosto S**, Agnello M, Bonaventura R, Matranga V. Physiological and cadmium induced apoptosis in *Paracentrotus lividus* larvae. 18th meeting ABCD – stress group, May 11th - 12th 2007, Hotel Sport Club Portorais, Carini (PA), Italy. pp 19.
25. Agnello M, **Filosto S**, Amato G, Gabriele G, Matranga V, Bonaventura R, Roccheri MC. Cadmium accumulation induces apoptosis in sea urchin embryos and larvae. IV annual Convention of Cellular and Developmental Biology Dept. “A. Monroy”, Univ. Palermo, December 20th - 21st 2006.
26. Roccheri MC, **Filosto S**, Agnello M, Rinaldi AM, Bonaventura R, Matranga V. Induction of apoptosis by cadmium in *Paracentrotus lividus* embryos and larvae. II Bilateral Seminar Italy-Japan, Responses of marine organisms to physical and chemical impacts, Palermo (Italy) CNR November 22nd - 25th 2006.

27. **Filosto S**, Agnello M, Amato G, Sprio C, Gabriele G, Rinaldi AM, Roccheri MC. Induction of apoptosis by cadmium in sea urchin embryos: possibile involvement of extrinsic pathway. VIII Convention FISV, September 28th – October 1st 2006, Riva Del Garda (TN), Italy.
28. **Filosto S**, Agnello M, Sprio C, Amato G, Gabriele G, Rinaldi AM, Roccheri MC. Cadmium as an Apoptotic Inducer in Sea Urchin Embryos: Possible Implication of an Extrinsic Pathway. International Congress: Cellular and Developmental Biology: in memory of Alberto Monroy. September 13-15th 2006, Univ. of Palermo, Dept. of Cell. and Develop. Biology.
29. Agnello M, **Filosto S**, Bosco L, Rinaldi AM, Roccheri MC. Cadmium induces apoptosis in *P. lividus* embryos. 52nd Convention G.E.I., June 6-9th 2006, Castello Aragonese, Otranto (Italy).