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**教育经历**

* 2001.01~2004.12，博士，罗马第二大学电子工程学院；

学位论文：Encapsulation of metallo-proteins into sol-gel derived matrices: properties and applications

* 2001.01~2002.09，联合培养博士，桑福德-伯纳姆-普利贝斯医学研究所传染感染病研究中心；

学位论文：Generation of innovative nanocomposite materials of biological and medical relevance

* 1992.09~2000.07，硕士，罗马第二大学电子工程学院；

学位论文：Realization of a sensor for the detection of gamma globulins

**工作经历**

* 2015.09~至今，罗马第二大学实验医学与外科学院， 副教授；
* 2016.05~至今，桑福德-伯纳姆-普利贝斯医学研究所传染感染病研究中心，兼职副教授；
* 2006.09~至今，加利福尼亚圣地亚哥分校纳米肿瘤中心，联合研究员；
* 2010.01~2015.08，罗马第二大学实验医学与外科学院， 助理教授；
* 2012.10~2016.04，桑福德-伯纳姆-普利贝斯医学研究所传染感染病研究中心，兼职助理教授；
* 2007.01~2012.09，桑福德-伯纳姆-普利贝斯医学研究所传染感染病研究中心，研究助理；
* 2005.01~2006.12，桑福德-伯纳姆-普利贝斯医学研究所传染感染病研究中心，博士后；

**科研项目**

* 2011.08~2013.07 意大利教育部基础科研基金，“Novel nanotechnology-based strategy for OA”，已结题，主持；
* 2009.09~2010.08 国家关节炎研究基金，“Nanosystem for targeting Treg in vivo”，已结题，主持；

**奖励荣誉**

* 2016，美国国家关节炎研究协会，旅行基金；
* 2015，美国国家关节炎研究协会，旅行基金；
* 2012，美国国家关节炎研究协会，John Vaughan奖；
* 2011，美国国家关节炎研究协会，John Vaughan奖；

**发表论文**

1. Bottini M., Magrini A., Fadeel B., Rosato, N. Tackling chondrocyte hypertrophy with multifunctional nanoparticles. Gene Therapy. 2016; 23 (7): 560-564.
2. Chaudhary S.C., Kuzynski M., Bottini M., Beniash E., Dokland T., Mobley C.G., Yadav M.C., Poliard A., Kellerman O., Millán J.L., Napierala D. Phosphate induces formation of matrix vesicles during odontoblast-initiated mineralization in vitro. Matrix Biology. 2016; 52-54: 284-300.
3. Yadav M.,\* Bottini M.,\* Cory E., Bhattacharya K., Kuss P., Narisawa, S., Sah R.L., Beck L., Fadeel B., Farquharson C., Millán J.L. Skeletal mineralization deficits and impaired biogenesis and function of chondrocyte-derived matrix vesicles in phospho1-/- and phospho1/Pi t1 double-knockout mice. Journal of Bone and Mineral Research. 2016; 31 (6): 1275-1286. \* = equal contribution. (volume cover page)
4. Bottini M., Foldvari M. Targeted nanosystems as therapeutic and diagnostic tools: The beautiful voyage of nanomedicine. Nanomedicine: Nanotechnology, Biology, and Medicine. 2016; 12 (2): 253-254.
5. Bottini M., Bhattacharya K., Fadeel B., Magrini A., Bottini N., Rosato N. Nanodrugs to target articular cartilage: an emerging platform for osteoarthritis therapy. Nanomedicine: Nanotechnology, Biology, and Medicine. 2016; 12 (2): 255-268.
6. Bhattacharya K., Mukherjee S.P., Gallud A., Burkert S.C., Bistarelli S., Bellucci S., Bottini M., Star A., Fadeel B. Biological interactions of carbon-based nanomaterials: from coronation to degradation. Nanomedicine: Nanotechnology, Biology, and Medicine. 2016; 12 (2): 333-351.
7. Stanford S.M., Aleman Muench G.R., Bartok B., Sacchetti C., Kiosses W.B., Sharma J., Maestre M.F., Bottini M., Mustelin T., Boyle D.L., Firestein G.S., Bottini N. TGFβ responsive tyrosine phosphatase promotes rheumatoid synovial fibroblast invasiveness. Annals of the Rheumatic Diseases. 2016; 75 (1): 295-302.
8. Sacchetti C., Liu-Bryan R., Magrini A., Rosato N., Bottini N., Bottini M. Polyethylene-glycol-modified single-walled carbon nanotubes for intra-articular delivery to chondrocytes. ACS Nano. 2014; 8 (12): 12280-12291.
9. Bhattacharya K., Sacchetti C., El-Sayed R., Fornara A., Kotchey G.P., Gaugler J.A., Star A., Bottini M., Fadeel B. Enzymatic 'stripping' and degradation of PEGylated carbon nanotubes. Nanoscale. 2014; 6 (24): 14686-14690.
10. Kuzynski M., Goss M., Bottini M., Yadav M.C., Mobley C., Winters T., Poliard A., Kellermann O., Lee B., Millán J.L., Napierala D. Dual role of the Trps1 transcription factor in dentin mineralization. J Biol Chem. 2014; 289 (40): 27481-27493.
11. Bottini M., Sacchetti C., Pietroiusti A., Bellucci S., Magrini A., Rosato N., Bottini N. Targeted nanodrugs for cancer therapy: prospects and challenges. J Nanosci Nanotechnol. 2014 Jan; 14 (1): 98-114.
12. Bottini M., Sacchetti C., Rapini N., Rosato N., Magrini A., Bottini N. Nanosystem for targeting Treg in vivo. Technical Proceedings of the 2013 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2013. 3: 300-303.
13. Campagnolo L., Massimiani M., Palmieri G., Bernardini R., Sacchetti C., Bergamaschi A., Vecchione L., Magrini A., Bottini M., Pietroiusti A. Biodistribution and toxicity of single wall carbon nanotubes in pregnant mice. Particle and Fibre Toxicology, 2013; 10 (1): 21.
14. Sacchetti C., Rapini N., Magrini A., Cirelli E., Bellucci S., Mattei M., Rosato N., Bottini N., Bottini M. In vivo targeting of intra-tumor regulatory T cells using PEG-modified single walled carbon nanotubes. Bioconjugate Chemistry, 2013; 24 (6): 852-858.
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17. Bottini M., Rosato N., Gloria F., Adanti S., Corradino N., Bergamaschi A., Magrini A. The public optimism towards nanomedicine. International Journal of Nanomedicine, 2011; 6: 3473-3485.
18. Bottini M., Rosato N., Bottini N. PEG-modified carbon nanotubes in biomedicine: current status and challenges ahead. Biomacromolecules. 2011; 12 (10): 3381-3393.
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20. Delogu L.G., Magrini A., Bergamaschi A., Rosato N., Dawson M.I., Bottini N., Bottini M. Conjugation of antisense oligonucleotides to PEGylated carbon nanotubes enables efficient knock-down of PTPN22 in T lymphocytes. Bioconjugate Chemistry. 2009; 20 (3): 427-431.
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24. Bottini M., Cerignoli F., Mills D., D’Annibale F., Leone M., Rosato N., Magrini A., Pellecchia M., Bergamaschi A., Mustelin T. Luminescent silica nanoparticles: characterization and evaluation as efficient cytoplasmatic transporters for T-lymphocytes. Journal of the American Chemical Society. 2007; 129 (25): 7814-7823.
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**出版书籍**

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2. Stanford S.M., Bottini M., Bottini N. The role of LMPTP in the metabolic syndrome. Protein Tyrosine Phosphatase Control of Metabolism. Editor Bence K.K., Springer, New York (NY). 2013.
3. Rapini N., Bottini N., Bottini M. Nanocarriers of antisense oligonucleotides in diabetes. Nanotechnology and nanomedicine in diabetes. Editor Preedy V.R., King’s College London, London (UK). 2012.
4. Bottini M., Dawson M.I., Mustelin T. Carbon nanotube-based inorganic supramolecular nanoassemblies. Encyclopedia of Nanoscience and Nanotechnology. Editor Nalwa H.S., American Scientific Publishers, Stevenson Ranch (CA), 2010.
5. Bottini M., Dawson M.I., Mustelin T. Carbon nanotube-based inorganic composites. Chemistry of Carbon Nanotubes. Editors Basiuk V.A. and Basiuk E.V., American Scientific Publishers, Stevenson Ranch (CA), 2007.

**会议报告**

* Bottini M. et al. "Atomic force microscopy: general principles and applications in osteoarthritis therapy and diagnosis", 2nd Regional Congress of the Brazilian Society of Biophysics, Aracaju, Brazil, 2016
* Bottini M. et al. "Atomic force microscopy of mineralization-competent matrix vesicles: a focus on the role of PHOSPHO1", 2nd Latin American Symposium on the Molecular mechanisms of Skeletal Mineralization, Natal, Brazil, 2016.
* Bottini M. et al., “Raman spectroscopy/microscopy for in situ monitoring of trafficking and degradation of PEG-modified single-walled carbon nanotubes”, Energy, Materials and Nanotechnology, 1st EMN Meeting on Nanomedicine, Cancun, Mexico, 2016.
* Bottini M. et al., “Engineered nanoparticles for therapeutic delivery to chondrocytes”, Annual Meeting of the American College of Rheumatology, San Francisco, USA, 2015.
* Bottini M. et al., “Targeted Nano systems for arthritis therapy”, ChinaNANO 2015, Beijing, China, 2015.
* Bottini M. et al., “Intra-articular carbon nanotubes in the treatment of osteoarthritis”, Energy, Materials and Nanotechnology, Workshop of Nanomedicine, Cancun, Mexico, 2015.
* Bottini M. et al., “PEG-modified carbon nanotubes in biology and medicine: past, present and future”, Energy, Materials and Nanotechnology, Workshop of Nanomedicine, Cancun, Mexico, 2014.
* Bottini M. et al., “Modified carbon nanotubes: from nanomedicine to nanotoxicology”, SPIE Optics + Photonics 2012, San Diego, USA, 2012.
* Bottini M., et al. “Functionalized carbon nanotubes as targeting and delivery systems”, 1st Italian-Swedish workshop on health impacts of engineered nanoparticles, Rome, Italy, 2010.
* Bottini M. et al., “Carbon nanotubes as delivery systems of antisense oligonucleotides in T lymphocytes”, NanoMex'09, Ensenada (Baja California), Mexico, 2009.
* Bottini M. et al., “Nanotechnology and nanomedicine”, 19th Advanced Course of Medical Radioprotection. Bressanone, Italy, 2005
* Bottini M. et al. “Nanosystem for targeting Treg in vivo”, 2013 NSTI Nanotechnology Conference and Expo, NSTI-Nanotech 2013. Washington, USA, 2013.
* Bottini M. et al. “Carbon nanotube-based nanoassemblies as intracellular delivery systems”, Carbon nanotubes between toxicity and biomedical applications. Torino, Italy, 2007.
* Bottini M. et al. “Carbon nanotubes cytotoxicity”, Nanoscience & Nanotechnology 2005. Frascati, Italy, 2005.
* Bottini M. et al. “Synthesys of sol-gel encapsulated azurin with metal ions: sensing properties”, MAM-04. Missoula, USA, 2004.
* Bottini M. et al. “Environmental and occupational impact of bio-nanotechnology” Nanotubes & Nanostructures 2003. Frascati, Italy, 2003.