

LI TANG

Personal Information

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Switzerland

Google Scholar ID: Li Tang (EPFL), h-index: 27; citations: 3563

<https://scholar.google.com/citations?user=juy1z8cAAAAJ&hl=en&authuser=1>

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Positions and Employment

Aug. 2016- Assistant Professor

Institute of Bioengineering (IBI)

École polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland

Aug. 2016- Assistant Professor

Institute of Materials Sci & Eng (IMX)

École polytechnique fédérale de Lausanne (EPFL), Lausanne, Switzerland

Education and Training

2013-2016 CRI Irvington Postdoctoral Fellow

The David H. Koch Institute for Integrative Cancer Research, Department of
Biological Engineering / Materials Science and Engineering

Massachusetts Institute of Technology (MIT), Cambridge, MA, USA

Advisor: Darrell J. Irvine

2007-2012 Ph.D., Materials Science and Engineering

University of Illinois at Urbana-Champaign (UIUC), Urbana, IL, USA.

Advisor: Jianjun Cheng

2003-2007 B.S., Chemistry

Peking University (PKU), Beijing, China

Honors and Awards

2021 Anna Fuller Award

2020 *Materials Horizons* Emerging Investigator

2020 Outstanding Reviewer for *Biomaterials Science*

2020 MIT TR 35 Innovators Under 35, China, MIT Technology Review

2019 *Biomaterials Science* Emerging Investigator

2018 European Research Council (ERC) Starting Grant

2018 Nano Research Young Innovator Award (NR 45 under age 45)

2013-2016 Irvington Postdoctoral Fellowship, Cancer Research Institute (CRI), New York, NY.

2015 Society for Immunotherapy of Cancer (SITC) Young Investigator Abstract Travel

- Award, SITC, Milwaukee, WI.
- 2015** MIT Postdoctoral Association Conference Travel Grant, MIT, Cambridge, MA.
- 2014** Marlana Felter Bradford Research Travel Fellowship, Koch Institute, MIT, Cambridge, MA.
- 2011-2013** Fellowship in Cancer Nanotechnology (**2 consecutive years**), NIH National Cancer Institute Alliance for Nanotechnology in Cancer 'Midwest Cancer Nanotechnology Training Center (M-CNTC)', UIUC, Urbana, IL.
- 2012** Poster Award, Annual Symposium of National Cancer M-CNTC, UIUC, Urbana, IL.
- 2012** Racheff-Intel Award (**1st place out of 4 awardees**) for outstanding graduate research, UIUC, Urbana, IL.
- 2012** Materials Science and Engineering Graduate Student Travel Award, UIUC, Urbana, IL.
- 2010** University Fellowship, UIUC, Urbana, IL.
- 2003-2007** Cyrus Tang Scholarship (**4 consecutive times**), Cyrus Tang Foundation, USA
- 2005-2006** Tai Zhao Undergraduate Research Fellowship for undergraduate scientific research, Sino Capital Education Foundation, Hong Kong, China

Publications

*corresponding author; #: equal contribution

48. Zhao, Y.; Xie, Y.-Q.; Nassiri, S.; Gao, M.; Guo, Y.; **Tang, L.*** "Switchable Immune Modulator for Tumor-Specific Activation of Anticancer Immunity", **2021**, in revision.
47. Gao, M.; Xie, Y.-Q.; Lei, K.; Zhao, Y.; Kurum, A.; Van Herck, S.; Guo, Y.; Hu, X.; **Tang, L.*** "A Manganese Phosphate Nanocluster Activates the cGAS-STING Pathway for Enhanced Cancer Immunotherapy", **Adv. Ther.** **2021**, in press.
46. Bonati, L.; **Tang, L.*** "Cytokine Engineering for Targeted Cancer Immunotherapy", **Curr. Opin. Chem. Biol.** **2021**, 62, 43-52.
45. Ferreira, D.P.; Silva, J.G.; Wyss, T.; Marraco, S.A.F.; Scarpellino, L.; Maas, R.; Siddiqui, I.; **Tang, L.**; Joyce, J.A.; Delorenzi, M.; Luther, S.; Speiser, D.E.; Held, W. "Central memory CD8⁺ T cells derive from stem-like Tcf7hi effector cells in the absence of cytotoxic differentiation", **Immunity**, **2020**, 53, 985-1000.e1011.
44. Lei, K.; Kurum, A.; Kaynak, M.; Guo, Y.; Xie, Y.-Q.; Gao, M.; Hannebelle, M.T.M.; Wu, Y.; Fantner, G.E.; Sakar, M.S.; **Tang, L.*** "Stiffening the plasma membrane of cancer cells enhances T-cell mechanical force and anti-tumour efficacy", **2021**, in revision.
43. Lei, K.; **Tang, L.*** "T Cell Force-Responsive Delivery of Anticancer Drugs Using Mesoporous Silica Microparticles", **Mater. Hori.** **2020**, 7, 3196-3200.
42. Lei, K.; Kurum, A.; **Tang, L.*** "Mechanical Immunoengineering of T-cells for Therapeutic Applications", **Acc. Chem. Res.** **2020**, 53, 2777–2790
41. Guo, Y.#; Xie, Y.-Q.#; Gao, M.; Zhao, Y.; Franco, F.; Wenes, M.; Siddiqui, I.; Bevilacqua, A.; Wang, H.; Yang, H.; Feng, B.; Xie, X.; Sabatel, C.M.; Tschumi, B.; Chaiboonchoe, A.; Wang, Y.; Li, W.; Xiao, W.; Held, W.; Romero, P.; Ho, P.-C.*; **Tang, L.*** "Metabolic Reprogramming of Terminally Exhausted CD8⁺ T-cells by IL-10/Fc Enhances Anti-Tumour Immunity", **Nat. Immunol.** **2021**, in press.

40. Yu, Y.-R.; Wang, H.; Imrichova, H.; Chao, T.; Xiao, Z.; Gao, M.; Franco, F.; Genolet, R.; Jandus, C.; Coukos, G.; Jiang, Y.-F.; Cheng, W.-C.; Locasale, J.; Zippelius, A.; Liu, P.-S.; **Tang, L.**; Bock, C.; Vannini, N.; Ho, P.-C. "Disturbed mitochondrial dynamics in CD8+ TILs reinforce T cell exhaustion", *Nat. Immunol.* **2020**, 21, 1540–1551.
39. Kurum, A.; Gao, M.; **Tang, L.*** "Synthetic 3D scaffolds for cancer immunotherapy", *Curr. Opin. Biotechnol.* **2019**, 65, 1-8.
38. Eskandari, S.K.; Sulkaj, I.; Melo, M.B.; Li, N.; Allos, H.; Kollar, B.; Borges, T.J.; Eskandari, A.S.; Cai, S.; Assaker, J.P.; Choi, J.Y.; Al Dulaijan, B.S.; Mansouri, A.; Haik, Y.; Leuvenink, H.G.D.; van Son, W.J.; Pomahac, B.; Riella, L.V.; **Tang, L.**; Seelen, M.A.J.; Irvine, D.J. & Azzi, J.R. "Regulatory T Cells Engineered with TCR-Signaling-Responsive IL-2 Nanogels Suppress Alloimmunity in Sites of Antigen Encounter", *Sci. Transl. Med.* **2020**, 12, eaaw4744
37. Wei, L.#; Zhao, Y.#; Hu, X.; **Tang, L.*** "Redox-Responsive Polycondensate Neoepitope for Enhanced Personalized Cancer Vaccine", *ACS Cent. Sci.* **2020**, 6, 404-412.
36. Loukogeorgakis, S.P.; Fachin, C.G.; Dias, A.S.; Li, H.; **Tang, L.**; Kim, A.G.; Vrecenak, J.D.; Stratigis, J.; Ahn, N.J.; Nissim, I.; Nissim, I.; Moron, A.F.; Martins, J.L.; Peranteau, W.H.; Coppi, P.D.; Irvine, D.L.; Flake, A.W. "Donor-Cell Engineering with GSK3 Inhibitor-Loaded Nanoparticles Enhances Engraftment Following in Utero Transplantation", *Blood* **2019**, 134, 1983-1995.
35. Guo, Y.; **Tang, L.*** "A Magnetic Nanovaccine Enhances Cancer Immunotherapy", *ACS Cent. Sci.* **2019**, 5, 747-749.
34. Xie, Y.-Q.; Arik, H.; Wei, L.; Zheng, Y.; Suh, H.; Irvine, D.J.; **Tang, L.*** "Redox-Responsive Interleukin-2 Nanogel Specifically and Safely Promotes the Proliferation and Memory Precursor Differentiation of Tumor-Reactive T-Cells", *Biomater. Sci.* **2019**, 7, 1345-1357. [Invited contribution as Biomaterials Science Emerging Investigator.](#)
33. Lei, K.; **Tang, L.*** "Surgery-free injectable macroscale biomaterials for local cancer immunotherapy", *Biomater. Sci.* **2019**, 7, 733-749. [Invited review.](#)
32. Zhao, Y.; Guo, Y.; **Tang, L.*** "Engineering Cancer Vaccines Using Stimuli-Responsive Biomaterials", *Nano Res.* **2018**, 11, 5355–5371. [Invited review.](#)
31. **Tang, L.***; Zheng, Y.; Melo, M.B.; Mabardi, L.; Castaño, A.P.; Xie, Y.-Q.; Li, N.; Kudchodkar, S.B.; Wong, H.C.; Jeng, E.K.; Maus, M.V. and Irvine, D.J.* "Enhancing T-cell Therapy Through TCR Signaling-Responsive Nanoparticle Drug Delivery", *Nat. Biotech.* **2018**, 36, 707-716. [Cover story of Nature Biotechnology, Volume 36 Issue 8, August 2018.](#) [Highlighted: MIT News, EPFL News, EurekAlert!, Phys.org, Nanowerk, My Science, eCancer, Health Canal, Medindia, Madrid, UPI.com, Science and Enterprise, Brinkwire, Sina, BioArt](#)
30. Guo, Y.; Lei, K.; **Tang, L.*** "Neoantigen Vaccine Delivery for Personalized Anticancer Immunotherapy", *Front. Immunol.* **2018**, 9, 1499. [Invited review.](#)
29. Yin, Q.; **Tang, L.**; Cai, K.; Yang, X.; Yin, L.; Zhang, Y.; Dobrucki, L.W.; Helferich, W.G.; Fan, T.M. and Cheng, J. "Albumin as a "Trojan Horse" for polymeric nanoconjugate transendothelial transport across tumor vasculatures for improved cancer targeting", *Biomater. Sci.* **2018**, 6, 1189-1200

28. Xie, Y-Q.; Wei, L.; **Tang, L.*** "Immunoengineering with Biomaterials for Enhanced Cancer Immunotherapy", *WIREs Nanomed. Nanobiotechnol.* **2018**, *10*, e1506. *Invited review. TOP DOWNLOADED PAPER 2018-2019.*
27. Zheng, Y.; **Tang, L.**; Kumari, S.; and Irvine, D.J. "Enhancing Adoptive Cell Therapy of Cancer through Targeted Delivery of Small-Molecule Immunomodulators to Internalizing or Noninternalizing Receptors", *ACS Nano* **2017**, *11*, 3089-3100.
26. Yang, Y.S.; Atukorale, P.; Moynihan, K.; Bekdemir, A.; Rakhra, K.; **Tang, L.**; Stellacci, F. and Irvine, D.J. "High-Throughput Quantitation of Inorganic Nanoparticle Biodistribution at the Single-Cell Level Using Mass Cytometry", *Nat. Comm.* **2017**, *8*, 14069.
25. Wang, H.; Wang, R.; Cai, K.; He, H.; Liu, Y.; Yen, J.; Wang, Z.; Xu, M.; Sun, Y.; Zhou, X.; Yin, Q.; **Tang, L.**; Dobrucki, I.T.; Dobrucki, L.W.; Chaney, E.J.; Boppart, S.A.; Fan, T.M.; Lezmi, S.; Chen, X.; Yin, L.; Cheng, J. "Selective in vivo Metabolic Cell-Labeling-Mediated Cancer Targeting", *Nat. Chem. Biol.* **2017**, *13*, 415-424.
24. Yin, Q.#; **Tang, L.#**; Tong, R.; Sternberg, R.; Yang, X.; Dobrucki, L.W.; Borst, L.B.; Kamstock, D.A.; Cai, K.; Song, Z.; Helferich, W.G.; Cheng, J. and Fan T.M. "Pamidronate Functionalized Nanoconjugates for Targeted Therapy of Focal Skeletal Malignant Osteolysis", *Proc. Natl. Acad. Sci.* **2016**, *113*, E4601-4609. *Highlighted: NIH Director' Blog, FierceBiotech, Noodles, EurekAlert!, Technology.org, Nanotechnology Now, Drug Discovery & Development, BioscienceTechnology, Azonano, Science Daily, Laboratory Journal, Phys.org, Nanowerk, Engineering at Illinois.*
23. Wang, H.; **Tang, L.**; Liu, Y.; Dobrucka, I.T.; Dobrucki, L.W.; Yin, L. and Cheng, J. "In Vivo Targeting of Metabolically Labeled Cancers with Ultra-Small Silica Nanoconjugates", *Theranostics* **2016**, *6*, 1467-1476.
22. Azzi, J., Yin, Q., Uehara, M., Ohori, S., **Tang, L.**, Cai, K., Ichimura, T., McGrath, M., Maarouf, O., Kefaloyianni, E., Loughhead, S., Petr, J., Sun, Q., Kwon, M., Tullius, S., von Andrian, U.H., Cheng, J. and Abdi, R. "Targeted Delivery of Immunomodulators to Lymph Nodes", *Cell Reports* **2016**, *15*, 1202-1213.
21. **Tang, L.**; Coyle, V.J.; Tong, R.; Yin, Q.; Pondenis, H.; Shor, S.; Borst, L.; Cheng, J.; Fan T.M. "Targeting Tumor Vasculature with Aptamer Functionalized Doxorubicin-Polylactide Nanoconjugates for Enhanced Cancer Therapy", *ACS Nano*, **2015**, *9*, 5072-5081.
20. Hotaling, N.A.#; **Tang, L.#**; Irvine, D.J.; Babensee, J.E. "Biomaterial Strategies for Immunomodulation", *Annu. Rev. Biomed. Eng.* **2015**, *17*, 317-349.
19. **Tang, L.#**; Yin, Q.#; Xu, Y.; Zhou, Q.; Cai, K.; Yen, J.; Dobrucki, L.W. and Cheng, J. "Bioorthogonal Oxime Ligation Mediated In Vivo Cancer Targeting", *Chem. Sci.*, **2015**, *6*, 2182-2186.
18. **Tang, L.**; Yang, X.; Yin, Q.; Cai, K.; Wang, H.; Chaudhury, I.; Yao, C.; Zhou, Q.; Kwon, M.; Hartman, J.A.; Dobrucki, L.W.; Dobrucki, I.T.; Borst, L.B.; Lezmi, S.; Helferich, W.G.; Ferguson, A.L.; Fan, T.M. and Cheng, J. "Investigating the Optimal Size of Anticancer Nanomedicine", *Proc. Natl. Acad. Sci.* **2014**, *111*, 15344-15349. *Highlighted: Engineering at Illinois, Nanowerk, MedicalXpress, Science Daily, Nanotechnology Now, Daily News, EurekAlert!, Azonano, Health Canal, Bionity, Controlled Environments, Technology Org., Nature Science-Business eXchange 7(43); doi:10.1038/scibx.2014.1275.*

17. Tong, R.; **Tang, L.**; Ma, L.; Tu, C.; Baumgartner, R. and Cheng, J. "Smart Chemistry in Polymeric Nanomedicines", *Chem. Soc. Rev.* **2014**, *43*, 6982-7012.
16. **Tang, L.**; Cheng, J. "Nonporous Silica Nanoparticles for Nanomedicine Applications", *Nano Today* **2013**, *8*, 290-312.
15. **Tang, L.**; Gabrielson, N.P.; Uckun, F. M.; Fan, T.M. and Cheng, J. "Size-Dependent Tumor Penetration and In Vivo Efficacy of Monodisperse Drug-silica Nanoconjugates", *Mol. Pharm.* **2013**, *10*, 883-892.
14. Xing, H.#; **Tang, L.**#; Yang, X.#; Hwang, K.; Wang, W.; Yin, Q.; Dobrucki, W.L.; Yasui, N.; Katzenellenbogen, J.A.; Helferich, W.G.; Cheng, J. and Lu, Y. "Enhanced Breast Cancer Therapy with Nucleolin-Aptamer-Functionalized Liposomes", *J. Mater. Chem. B* **2013**, *1*, 5288-5297.
13. Wang, H.; **Tang, L.**; Tu, C.; Song, Z.; Yin, Q.; Yin, L.; Zhang, Z.; Cheng, J. "Redox-Responsive, Core-Cross-Linked Micelles Capable of On-Demand, Concurrent Drug Release and Structure Disassembly", *Biomacromolecules* **2013**, *14*, 3706-3712.
12. Zhang, Y.; Yin, Q.; Yin, L.; Ma, L.; **Tang, L.**; Cheng, J. "Chain-Shattering Polymeric Therapeutics with On-Demand Drug-Release Capability", *Angew. Chem. Int. Ed.* **2013**, *52*, 6435-6439.
11. **Tang, L.**; Yang, X.; Dobrucki, W.L.; Chaudhury, I.; Yin, Q.; Yao, C.; Lezmi, S.; Helferich, W.G.; Fan, T.M. and Cheng, J. "Aptamer-Functionalized, Ultra-Small, Monodisperse Silica Nanoconjugates for Targeted Dual-Modal Imaging of Lymph Nodes with Metastatic Tumors", *Angew. Chem. Int. Ed.* **2012**, *51*, 12721-12726. *Highlighted: Nature Science-Business eXchange 5(45); doi:10.1038/scibx.2012.1193.*
10. **Tang, L.**; Fan, T.M.; Borst, L.B. and Cheng, J. "Synthesis and Biological Response of Size-Specific, Monodisperse Drug-Silica Nanoconjugates", *ACS Nano* **2012**, *6*, 3954-3966.
9. **Tang, L.**; Azzi, J.; Kwon, M.; Mounayar, M.; Tong, R.; Yin, Q.; Moore, R.; Skartsis, N.; Fan, T.M.; Abdi, R.; Cheng, J. "Immunosuppressive Activity of Size-Controlled PEG-PLGA Nanoparticles Containing Encapsulated Cyclosporine A", *J. Transplant.* **2012**, Article ID 896141.
8. Cely, I.; Yiv, S.; Yin, Q.; Shahidzadeh, A.; **Tang, L.**; Cheng, J.; Uckun, F.M. "Targeting Mantle Cell Lymphoma with Anti-SYK Nanoparticles", *J. Analy. Oncol.* **2012**, *1*, 1-9.
7. Chen, K.J.#; **Tang, L.**#; Garcia, M.A.; Wang, H.; Lu, H.; Lin, W.Y.; Hou, S.; Yin, Q.; Shen, C.K.F.; Cheng, J.; Tseng, H.R. "The Therapeutic Efficacy of Camptothecin-Encapsulated Supramolecular Nanoparticles", *Biomaterials* **2011**, *33*, 1162-1169.
6. Mishra, A.; Lai, G.H.; Schmidt, N.W.; Sun, V.Z.; Rodriguez, A.R., Tong, R.; **Tang, L.**; Cheng, J.; Deming, T.J.; Kamei, D.T.; Wong, G.C.L. "Translocation of HIV TAT Peptide and Analogues Induced by Multiplexed Membrane and Cytoskeletal Interactions", *Proc. Natl. Acad. Sci.* **2011**, *108*, 16883-16888.
5. Azzi, J.#; **Tang, L.**#; Moore, R.; Tong, R.; El, Haddad N.; Akiyoshi, T.; Mfarrej, B.; Yang, S.; Jurewicz, M.; Ichimura, T.; Lindeman, N.; Cheng, J.; Abdi, R. "Polylactide-Cyclosporin A Nanoparticles for Targeted Immunosuppression", *FASEB J.* **2010**, *24*, 3927-3938.
4. Chaney, E. J.; **Tang, L.**; Tong, R.; Rezaeipoor, R.; Cheng, J.; Boppart, S. "Lymphatic Biodistribution of Polylactide Nanoparticles", *Mol. Imag.* **2010**, *9*, 153-162.

3. Tong, R.; Coyle, V.J.; **Tang, L.**; Barger, A.M., Fan, T.M.; Cheng, J. "Polylactide Nanoparticles Containing Stably-Incorporated Cyanine Dyes for *In Vitro* and *In Vivo* Imaging Applications", *Microsc. Res. Tech.* **2010**, 73, 901-909.
2. Tong, R.; Christian, D.A.; **Tang, L.**; Cabral, H.; Baker, J.R. Jr.; Kataoka, K.; Discher, D.; Cheng, J. "Nanopolymeric Therapeutics", *MRS Bulletin* **2009**, 34, 422-431.
1. Lu, C.; Qi, L.; Yang J.; **Tang, L.**, Zhang, D.; Ma, J. "Hydrothermal Growth of Large-scale Micropatterned Arrays of Ultralong ZnO Nanowires and Nanobelts on Zinc Substrate", *Chem. Commun.* **2006**, 3551-3553.

Book Chapters

- 2013** Tong, R.; **Tang, L.**; Gabrielson, Nathan P.; Yin, Q.; Cheng, J. "Polymer-Drug Nanoconjugates", in *Nanoparticulate drug delivery systems: Strategies, Technologies, and Applications*, Eds: Yeo, Y. (John Wiley & Sons, Hoboken, NJ, USA, **2013**). ISBN 978-1-118-14887-7.
- 2012** Tong, R.; **Tang, L.**; Cheng, J. "Development and Application of Anticancer Nanomedicine", in *Multifunctional Nanoparticles for Drug Delivery Applications: Imaging, Targeting, and Delivery*, Eds: Svenson, S. and Prud'homme, R. K. (Springer Science+Business Media, LLC, New York, NY, USA, **2012**). ISBN 978-1-4614-2304-1.

Patents

- 2019** Guo, Y.; **Tang, L.**; Xie, Y.-Q. "IL10/FC FUSION PROTEINS USEFUL AS ENHANCERS OF IMMUNOTHERAPIES", EP19198358, PCT application No. PCT/EP2020/076089.
- 2019** **Tang, L.**; Zhao, Y.; Xie, Y.-Q. "Peptides Comprising a Hydrophilic Polymer", provisional application.
- 2019** **Tang, L.**; Xie, Y.-Q. "Complexes of peptides and negatively charged polymers", provisional application.
- 2019** **Tang, L.**; Wei, L.; Zhao, Y. "Polymer or Polycondensate Based on Peptide, Linker and Optionally Other Monomers", EP19198817.9, PCT/EP2020/076196.
- 2015** Irvine, D.J.; Zheng, Y.; **Tang, L.** "Efficient and Stable Cell Surface Coupling of Nanoparticles", US 20170080104 A1, licensed.
- 2015** **Tang, L.**; Irvine, D.J. "Carrier-Free Biologically-Active Protein Nanogels", US 20150110740, licensed.
- 2011** Cheng, J; **Tang, L.** "Silica Nanoparticle Agent Conjugates", US 61/418,230 **2010**, WO PCT/US2011/062548, licensed.

Presentations (2016-)

Invited Talks

- 2020.12** Materials Research Society (MRS) Fall Meeting, Boston, USA. *Panelist, SM07.06 - Biomaterials for Studying and Controlling the Immune System.*
- 2020.09** Convergence in Oncology Summit, Lausanne, Switzerland. *Panelist, CAR-T Cell Therapies: Challenges and Opportunities.*
- 2020.05** Immunology on-line seminars, Zoom seminars.
- 2020.02** 2nd Swiss Cytometry Meeting, Lausanne, Switzerland.

- 2019.12** EmTech China (ceremony for MIT TR 35 Innovators Under 35-China region 2019), Beijing, China.
- 2019.11** The Fourth International Conference of Epigenetics & Biomedicines, Guangzhou, China.
- 2019.10** Dendritic Cells Immunotherapy & Next Generation Vaccines days 2019, Miltenyi Biotec GmbH, Bergisch Gladbach, Germany.
- 2019.9** 1st Asian Young Investigator Symposium on Pharmaceutical Science and Technology, AYSPST (AYISPST 2019) & the 1st Young Editorial Board Conference of AJPS, Chengdu, China.
- 2019.5** The 17th Annual Meeting of Association for Cancer Immunotherapy (CIMT) Mainz, Germany.
- 2019.5** Synthetic and Systems Immunology, Ascona, Switzerland.
- 2019.4** Department of Molecular Sciences and Nanosystems Ca' Foscari University of Venice, Via Torino, Italy
- 2018.12** Institute for Molecular Life Sciences Radboudumc (RIMLS), Nijmegen, The Netherlands.
- 2018.12** Leiden University, The Netherlands.
- 2018.10** 2018 BMES Annual Meeting, Atlanta, GA, USA.
- 2018.10** MD Anderson Cancer Center, Houston, TX, USA.
- 2018.10** Baylor College of Medicine, TX, USA.
- 2018.9** Stanford University School of Medicine, Stanford, CA, USA.
- 2018.9** Cell Therapies and Bioengineering Conference organized by AIChE, San Francisco, CA, USA.
- 2018.9** ETH Summer School: "New Frontiers in Extracellular Matrix Research: From regeneration to immunology, mechanics and soft robotics", Zurich, Switzerland.
- 2018.9** ISREC-SCCL Symposium 2018 "Horizons of Cancer Biology and Therapy", Lausanne, Switzerland.
- 2018.9** **Plenary Talk**, International Seminar on Cellular Therapy 2018, Hangzhou, China.
- 2018.9** Zhejiang University School of Medicine, Hangzhou, China.
- 2018.8** West China Center of Medical Sciences of Sichuan University, Chengdu, China.
- 2018.8** XtalPi Inc., Shenzhen, China.
- 2018.7** Miltenyi Biotec GmbH, Bergisch Gladbach, Germany.
- 2018.6** The 24th Annual Meeting of the SSB+RM: Bioinspired Materials, University of Fribourg, Switzerland.
- 2018.6** ISREC Faculty Lunch Seminar, EPFL.
- 2018.4** Materials Research Society (MRS) Spring Meeting in Phoenix, AZ, USA.
- 2017.9** Dendritic Cells Immunotherapy Day, Miltenyi Biotec GmbH, Bergisch Gladbach, Germany.
- 2017.8** Annual meeting of the PhD program in Pharmaceutical Sciences, The Geneva-Lausanne School of Pharmacy (EPGL), Zermatt, Switzerland.
- 2017.8** Institute of Functional Nano & Soft Materials at Soochow University, Suzhou,

- China.
- 2017.8** Department of Materials Science & Engineering at Beijing University of Chemical Technology, Beijing, China.
- 2017.5** Department of Biology, The Molecular Health Sciences (MHS) Platform at ETH Zürich, Zürich, Switzerland.
- 2017.5** Faculty Retreat of Swiss Cancer Center Lausanne (SCCL), Lausanne, Switzerland.
- 2017.4** Department of Bioengineering at Stanford University, Stanford, CA, USA.
- 2017.4** Department of Biochemistry and Molecular Medicine at University of California, Davis, Sacramento, CA, USA.
- 2017.4** The 253rd American Chemical Society (ACS) National Meeting & Exposition, San Francisco, CA, USA.
- 2017.3** Joint Research Symposium of EPFL and Tokyo Medical and Dental University (TMDU) on Biomaterials & Bioelectronics, Lausanne, Switzerland.
- 2017.2** EPFL School of Life Sciences Faculty Retreat for Bio(logical) engineering, Chexbres, Switzerland.
- 2016.12** EPFL School of Engineering Standing Lunch, Lausanne, Switzerland.
- 2016.12** Joint Symposium of EPFL and University of Tokyo on Frontiers in NanoBioEngineering and Medicine, Lausanne, Switzerland.
- 2016.11** The 5th Faculty & Staff Retreat of the Lausanne Cancer Research Community, Lausanne, Switzerland.
- 2016.7** College of Chemistry and Molecular Engineering, Peking University (PKU), Beijing, China.
- 2016.7** Department of Macromolecular Science and the Institute of Macromolecular Science, Fudan University, Shanghai, China.
- 2016.7** School of Chemistry and Chemical Engineering, Shanghai Jiao Tong University (SJTU), Shanghai, China.
- 2016.7** The Bio-X Institutes of Shanghai Jiao Tong University (SJTU), Shanghai, China.
- 2016.7** Shanghai Jiao Tong University (SJTU) School of Medicine, Shanghai, China.
- 2016.1** New Directions in Cancer Care for Nonspecialists: Immunotherapy and Resistance to Therapy, Boston University, Boston, MA, USA.
<https://youtu.be/-zbPE-1o9UY?t=8m52s>

Contributed Talks/Posters

- 2019.10** CRI-CIMT-EATI-AACR International Cancer Immunotherapy Conference, Paris, France.
- 2018.5** CIMT 2018 Annual Meeting, Mainz, Germany.
- 2017.9** The Third CRI-CIMT-EATI-AACR International Cancer Immunotherapy Conference, Mainz, Germany.
- 2016.9** "ISREC-SCCL 2016: Horizons of Cancer Biology and Therapy, Lausanne, Switzerland.

Supervision of Students and Trainees

Postdoctoral Fellows (5)

2020- Simon Van Herck
2020- Yi Wang
2019- Bing Feng
2017- Yugang Guo
2017-2021 Yu Zhao

Doctoral Students (10)

2020- Rongrong Li (EPFL-EDBB)
2019- Lucia Bonati (EPFL-EDBB)
2019- Xiaomeng Hu (EPFL-EDBB)
2019- Kurum, Armand (EPFL-EDMX)
2018- Yang Zhao (EPFL-EDBB)
2018- Min Gao (EPFL-EDBB)
2018- Céline Jasmin Prange (EPFL-EDCH), co-advised
2017- Kewen Lei (EPFL-EDMX)
2017- Lixia Wei (EPFL-EDMX), co-advised
2016- Yuqing, Xie (EPFL-EDBB)

Master Students (27)

2020 De La Taille Thibault (EPFL- Bioengineering), Semester Project
2020 Nadia Ben Sayed (University of Basel), supervisor for Master Thesis
2020 Micaela Siria Cristofori (Polytechnic of Milan, Italy), supervisor for Master Thesis
2019 Citak Mehmet Kerem (EPFL- Materials Science and Engineering), Semester Project
2019 Julia Juliette Fossati (EPFL- Bioengineering), Semester Project
2019 Daniel Nakhaee-Zadeh Gutierrez (EPFL- Bioengineering), supervisor for Master Thesis
2019 Francesca Pontanari (EPFL- Bioengineering), Semester Project
2019 Vuille-Dit-Bille Emilie (EPFL- Materials Science and Engineering), Semester Project
2019 Sara de Grandis (Technical University of Denmark- Bioengineering exchange student), Semester Project
2019 Julian Barry (EPFL- Bioengineering), supervisor for Master Thesis
2019 Christina Aberer (EPFL- Bioengineering), Semester Project
2019 Mohab Elhawary (Univ. Geneva- Department of Molecular Biology and National Centre for Competence in Research in Chemical Biology), supervisor for Master Thesis
2019 Costa Borges Stéphane (EPFL- Chemical Sciences and Engineering), supervisor for Master thesis
2019 Mercado Cesar Albert (EPFL- Chemical Sciences and Engineering), supervisor for

Master Thesis

- 2018** Mai Yuanfei (EPFL- Bioengineering), Semester Project
- 2018** Ghadamieh Fatemeh (EPFL- Bioengineering), Semester Project
- 2018** Gwendoline Wicki (EPFL- Bioengineering), Semester Project
- 2018** Sanja Tosheska (EPFL- Bioengineering), Semester Project
- 2018** Christina Aberer (EPFL- Bioengineering), Semester Project
- 2018** Crivello Giulia (EPFL- Bioengineering), Semester Project
- 2018** Daniel Nakhaee-Zadeh Gutierrez (EPFL- Bioengineering), Semester Project
- 2018** Julia Hauenstein (EPFL- Bioengineering), Semester Project
- 2018** Hacer Arik (EPFL- Bioengineering), supervisor for Master Thesis
- 2017** Shahana Bishnoi (EPFL- Bioengineering), Semester Project
- 2017** Luca Vergano (EPFL-Materials Science and Engineering), Semester Project
- 2017** Sanja Tosheska (EPFL- Materials Science and Engineering), Semester Project
- 2016** Kamyar Mehrabi Kochehbyoki (EPFL- Materials Science and Engineering), supervisor for Master Thesis

Bachelor Students (14)

- 2019** Thierion De Monclin Orla Marie Bettina (EPFL-Life Sciences & Technology), Semester Project
- 2019** Ben Romdhane Ahmed (EPFL-Life Sciences & Technology), Semester Project
- 2019** Zablocki Thelma (EPFL-Life Sciences & Technology), Semester Project
- 2019** Calisti Caterina (EPFL-Life Sciences & Technology), Semester Project
- 2019** Berneron Blanche Alice Heloise (EPFL-Life Sciences & Technology), Semester Project
- 2019** Michael Halim (EPFL-Life Sciences & Technology), Semester Project
- 2019** Andreas Hurtado Iglesias (EPFL-Life Sciences & Technology), Semester Project
- 2018** Clara Saphyre David-Vaude (EPFL-Life Sciences & Technology), Semester Project
- 2018** Weng Yepeng (EPFL- Materials Science and Engineering), Semester Project
- 2018** Ren Jingfei (EPFL-Life Sciences & Technology), Semester Project
- 2018** Wan Richie Yat-tsai (EPFL-Life Sciences & Technology), Semester Project
- 2017** Lucas Eckes (EPFL-Life Sciences & Technology), Semester Project
- 2017** Sirine Sayagh (EPFL-Life Sciences & Technology), Semester Project
- 2017** Milad Dulloo (EPFL-Life Sciences & Technology), Semester Project

Internship Students (5)

- 2019** Zi-Fan He (STI E3 program), National Tsing Hua University, Taiwan
- 2019** Shayan Hemmati, Johns Hopkins University, USA
- 2019** Amruta, Nanyang Technological University, Singapore
- 2018** James Li, Johns Hopkins University, USA
- 2018** Nabeel Ahmad, Université de Franche-Comté, France

Student Awards

- 2020** Xiaomeng Hu, doctoral fellowship of the 'EPFL|nnovators' programme (Marie Skłodowska-Curie Actions – COFUND project under Horizon 2020).
- 2019** Armand Kurum, doctoral fellowship of the 'EPFL|nnovators' programme (Marie Skłodowska-Curie Actions – COFUND project under Horizon 2020).
- 2019** Xiaomeng Hu, CSC Scholarship offered by China Scholarship Council
- 2018** Min Gao, CSC Scholarship offered by China Scholarship Council
- 2018** Yu Zhao, EuroTechPostdoc Fellowship

Committee Member

Candidacy Exam

- 2021.01** Lucia Bonati (EPFL-EDBB)
- 2020.09** Xiaomeng Hu (EPFL-EDBB)
- 2020.08** Armand Kurum (EPFL-EDMX)
- 2020.07** Saeid Ansaryan (EPFL-EDBB)
- 2020.04** Antonius Chrisnandy (EPFL-EDCH)
- 2019.12** Yang Zhao (EPFL-EDBB)
- 2019.11** Min Gao (EPFL-EDBB)
- 2019.10** Olga Mitrofanova (EPFL-EDBB)
- 2019.06** Céline Jasmin Prange (EPFL-EDCH)
- 2018.04** Michael Shur (EPFL-EDMX)
- 2018.03** Lixia Wei (EPFL-EDMX)
- 2017.11** Cristiana Berti (EPFL-EDMX)
- 2017.10** Yuqing, Xie (EPFL-EDBB)
- 2017.10** Grégoire Michielin (EPFL-EDBB)
- 2017.05** Saba Rezakhani (EPFL-EDCH)
- 2017.01** Markus Schuster (EPFL-EDMX)

PhD Defense

- 2020.08** Markus Schuster (EPFL-EDMX)
- 2020.01** Sandra Hocevar (University of Geneva)
- 2019.10** François Rivest (EPFL-EDBB)
- 2018.03** Inès Mottas (PhD in Pharmaceutical Sciences, Ecole de Pharmacie Genève-Lausanne (EPGL), University of Geneva (UniGE))
- 2017.07** Maxime Ayer (EPFL-EDMX)

Internal service

- 2020-** EPFL Flow Cytometry Core Facility Steering committee

Teaching

Lecturer

- 2021 Spring** BIOENG-449 Tissue Engineering, EPFL
- 2021 Spring** BIOENG-399 Immunoengineering, EPFL

- 2020 Spring** BIO-603(TL) Lab Practical Course for doctoral students - Tang Lab, EPFL
- 2020 Spring** BIOENG-449 Tissue Engineering, EPFL
- 2020 Spring** BIOENG-399 Immunoengineering, EPFL
- 2019 Fall** BIO-467 Scientific literature analysis in Bioengineering, EPFL
- 2019 Spring** BIOENG-449 Tissue Engineering, EPFL
- 2019 Spring** BIOENG-399 Immunoengineering, EPFL
- 2018 Fall** BIO-467 Scientific literature analysis in Bioengineering, EPFL
- 2018 Spring** BIOENG-399 Immunoengineering, EPFL (**new course**)
- 2017 Fall** BIO-467 Scientific literature analysis in Bioengineering, EPFL
- 2016 Fall** BIO-467 Scientific literature analysis in Bioengineering, EPFL

Guest Lecturer

- 2019 Fall** Summer course in Immunology, UNIL
- 2018 Fall** BIOENG-315_Materials science for bioengineers, EPFL
- 2018 Spring** BIOENG-442 Biomaterials, EPFL
- 2017 Fall** BIO-479 Immunology, EPFL
- 2017 Spring** BIOENG-442 Biomaterials, EPFL
- 2017 Fall** MSE-471 Biomaterials, EPFL
- 2016 Fall** MSE-471 Biomaterials, EPFL

Grant Reviewer

- 2020.09** Swiss Cancer League Grant
- 2020.03** Swiss Cancer League Grant
- 2019** Dutch Research Council (NWO), Domain Applied and Engineering Sciences (AES), The Netherlands
- 2019** Postdoctoral fellowship application of Research Foundation Flanders (FWO)
- 2019** Programme Translational Research, The Netherlands Organisation for Health Research and Development (ZonMw)
- 2018** Excellence Research Foundation Flanders (FWO)-New research project proposal, Belgium
- 2018** Excellence Research Foundation Flanders (FWO)-Bilateral Scientific Cooperation, Belgium
- 2017** European Research Council (ERC): Remote Referee for ERC Consolidator Grant
- 2017** Swiss Cancer League Grant
- 2017** Excellence Initiative for the site Bourgogne Franche-Comté deployed by the Université Bourgogne Franche-Comté (UBFC), France.

Journal Reviewer (>40 journals)

Science Translational Medicine, Science Advance, Nature Nanotechnology, Nature Biomedical Engineering, Nature Communications, ACS Central Science, Journal of the American Chemical Society, Angewandte Chemie International Edition, ACS Nano, Nano Letters, Advanced Materials, Advanced Functional Materials, Advanced Healthcare Materials, ChemMedChem, Chemical Communications, Accounts of Chemical Research, Biomacromolecules, Bioconjugate

Chemistry, ACS Biomaterials Science & Engineering, Molecular Pharmaceutics, Langmuir, ACS Applied Materials & Interfaces, Chemical Science, Journal of Materials Chemistry B, Integrative Biology, Nanoscale, Polymer Chemistry, Polymer, Biomaterials, Biomaterials Science, Colloids and Surfaces B: Biointerfaces, Journal of Biomaterials Applications, Scientific Reports, RSC Advances, MRS Advance, Theranostics, Nano Research, Journal of Immunology, Frontiers in Immunology

Editorial Board

- 2021.2-** Member of the Editorial Board, *Current Opinion in Biotechnology* (IF=8.460)
- 2021.2-** Review Editor on the Editorial Board of System Immunology, *Frontiers in Immunology* (IF=6.429)
- 2019-** Guest Editorial, *Current Opinion in Biotechnology* (IF=8.460), a themed issue "Tissue, Cell and Pathway Engineering 2020".
- 2019-** Guest Editorial, *Frontiers in Immunology* (IF=6.429), a themed issue "Employing Biomaterials to Further Basic Understanding of Immunobiology".
- 2019.4-** Editorial Board Member, *Journal of Nanobiotechnology* (IF=5.803)
- 2018.12-** Associate Editor, *Immuno-Oncology Technology*, European Society for Medical Oncology (ESMO)

Conference Organizer

- 2020.2** Chair, 1st Conference of EPFL Initiative in Cancer Science & Engineering (EICSE), Lausanne, Switzerland.
- 2019.10** Session chair, Dendritic Cells Immunotherapy & Next Generation Vaccines days 2019, Miltenyi Biotec GmbH, Bergisch Gladbach, Germany.
- 2018.10** Session chair, "Drug Delivering Biomaterials", 2018 BMES Annual Meeting, Atlanta, GA, USA.
- 2017.4** Session chair, symposium entitled "Biomaterials for Immunotherapy", the 253rd American Chemical Society (ACS) National Meeting & Exposition in San Francisco, CA, USA
- 2017.3** Session chair, Joint Research Symposium of EPFL and Tokyo Medical and Dental University (TMDU) on Biomaterials & Bioelectronics, Lausanne, Switzerland
- 2016.12** Session chair, Joint Symposium of EPFL and University of Tokyo on Frontiers in NanoBioEngineering and Medicine, Lausanne, Switzerland.
- 2012.4** Session chair, "Nano Biomaterials for Drug Delivery and Sensing Applications" at Cancer Community at Illinois Symposium, UIUC, Urbana, IL, USA

Professional Memberships

- 2017-** Member, European Academy of Tumour Immunology (EATI)
- 2017-** Member, Swiss Society for Biomaterials and Regenerative Medicine (SSB+RM)
- 2017-** Member, The Association for Cancer Immunotherapy (CIMT)
- 2015-** Member, Society for Immunotherapy of Cancer (SITC)
- 2014-** Member, Biomedical Engineering Society (BMES)
- 2014-** Member, American Association for Cancer Research (AACR)
- 2014-** Member, Materials Research Society (MRS)
- 2009-** Member, American Chemical Society (ACS)