



Ning Cheng

Postdoctoral Research Fellow, Hematology

Bio

HONORS AND AWARDS

- Derek T. Turner Award (oral session), North Carolina Section of American Association of Dental Research (NC-AADR) (2018)
- Graduate Student Transportation Grant, UNC-CH (2018)
- NCI K00 Predoctoral to Postdoctoral Fellow Transition Award (4K00CA223019), National Institute of Health/National Cancer Institute (NIH/NCI) (2018)
- Prestigious External Fellowship, UNC-CH (2018)
- Dissertation Completion Fellowship, UNC-CH (2017)
- NCI F99 Predoctoral to Postdoctoral Fellow Transition Award (1F99CA223019), National Institute of Health/National Cancer Institute (NIH/NCI) (2017)
- NCI Predoctoral to Postdoctoral F99/K00 Fellowship Application UNC-CH Nominee, UNC-CH (2017)
- Freedland Advanced Dental Education Fellowship, Dental Foundation of North Carolina (2016)
- Derek T. Turner Award Finalist (poster session), NC-AADR (2014)
- Doctoral Merit Assistantship, UNC-CH (2013)
- 1st Class Graduate Scholarships for Outstanding Academic Performance, Wuhan University (2010-2013)
- Undergraduate Research Award, Wuhan University (2008)
- “Heraeus Kulzer” Honor Scholarship for Excellent Dental Students, Heraeus Kulzer (2008)
- 1st Prize for pioneer of college student's social activity, Hubei Province, China (2007)
- Excellent League Member, Wuhan University (2007)
- Undergraduate Scholarships for Outstanding Academic Performance, Wuhan university (2005-2010)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, American Dental Education Association (2018 - present)
- Member, Society for Leukocyte Biology (2015 - present)
- Member, American Association of Immunologists (2017 - present)
- Member, International Association for Dental Research (2015 - present)

PROFESSIONAL EDUCATION

- Doctor of Philosophy, Wuhan University (2015)
- Doctor of Dental Surgery, Wuhan University (2015)
- Doctor of Philosophy, University of North Carolina, Chapel Hill (2018)
- Bachelor of Medicine, Wuhan University (2010)

PATENTS

- Ning Cheng. "United States Patent OTD: 15-0080. Attorney Docket N. 5470-787PR Methods and compositions for inducing an immune response.", UNC-CH, Sep 19, 2016

LINKS

- Google Scholar: <https://scholar.google.com/citations?user=6U2fuNwAAAAJ&hl=en>
- ResearchGate: https://www.researchgate.net/profile/Ning_Cheng2

Publications

PUBLICATIONS

- **A robust microparticle platform for a STING-targeted adjuvant that enhances both humoral and cellular immunity during vaccination.** *Journal of controlled release : official journal of the Controlled Release Society*
Junkins, R. D., Gallovic, M. D., Johnson, B. M., Collier, M. A., Watkins-Schulz, R., Cheng, N., David, C. N., McGee, C. E., Sempowski, G. D., Shterev, I., McKinnon, K., Bachelder, E. M., Ainslie, et al
2018; 270: 1–13
- **A nanoparticle-incorporated STING activator enhances antitumor immunity in PD-L1-insensitive models of triple-negative breast cancer.** *JCI insight*
Cheng, N., Watkins-Schulz, R., Junkins, R. D., David, C. N., Johnson, B. M., Montgomery, S. A., Peine, K. J., Darr, D. B., Yuan, H., McKinnon, K. P., Liu, Q., Miao, L., Huang, et al
2018; 3 (22)
- **The Inhibitory Innate Immune Sensor NLRP12 Maintains a Threshold against Obesity by Regulating Gut Microbiota Homeostasis.** *Cell host & microbe*
Truax, A. D., Chen, L., Tam, J. W., Cheng, N., Guo, H., Koblansky, A. A., Chou, W. C., Wilson, J. E., Brickey, W. J., Petrucelli, A., Liu, R., Cooper, D. E., Koenigsnecht, et al
2018; 24 (3): 364–78.e6
- **The Toll-Like Receptor 2/6 Agonist, FSL-1 Lipopeptide, Therapeutically Mitigates Acute Radiation Syndrome.** *Scientific reports*
Kurkjian, C. J., Guo, H., Montgomery, N. D., Cheng, N., Yuan, H., Merrill, J. R., Sempowski, G. D., Brickey, W. J., Ting, J. P.
2017; 7 (1): 17355
- **Arp2/3 Complex Is Required for Macrophage Integrin Functions but Is Dispensable for FcR Phagocytosis and In Vivo Motility.** *Developmental cell*
Rotty, J. D., Brighton, H. E., Craig, S. L., Asokan, S. B., Cheng, N., Ting, J. P., Bear, J. E.
2017; 42 (5): 498–513.e6
- **The effect of mesoporous bioglass on osteogenesis and adipogenesis of osteoporotic BMSCs.** *Journal of biomedical materials research. Part A*
Wu, T., Cheng, N., Xu, C., Sun, W., Yu, C., Shi, B.
2016; 104 (12): 3004–14
- **PNIPAAm modified mesoporous hydroxyapatite for sustained osteogenic drug release and promoting cell attachment.** *Materials science & engineering. C, Materials for biological applications*
Wu, T., Tan, L., Cheng, N., Yan, Q., Zhang, Y. F., Liu, C. J., Shi, B.
2016; 62: 888–96
- **Effect of retinoic acid on the function of lipopolysaccharide-stimulated bone marrow stromal cells grown on titanium surfaces.** *Inflammation research : official journal of the European Histamine Research Society ... [et al.]*
Yan, Q., Li, Y., Cheng, N., Sun, W., Shi, B.
2015; 64 (1): 63–70
- **Effect of decreased implant healing time on bone (re)modeling adjacent to plateaued implants under functional loading in a dog model.** *Clinical oral investigations*
Dai, J., Cheng, N., Miron, R. J., Shi, B., Cheng, X., Zhang, Y.
2014; 18 (1): 77–86
- **The osteogenic potential of mesoporous bioglasses/silk and non-mesoporous bioglasses/silk scaffolds in ovariectomized rats: in vitro and in vivo evaluation.** *PloS one*
Cheng, N., Wang, Y., Zhang, Y., Shi, B.
2013; 8 (11): e81014

- **Porous CaP/silk composite scaffolds to repair femur defects in an osteoporotic model.** *Journal of materials science. Materials in medicine*
Cheng, N., Dai, J., Cheng, X., Li, S., Miron, R. J., Wu, T., Chen, W., Zhang, Y., Shi, B.
2013; 24 (8): 1963–75
- **Delivery of PDGF-B and BMP-7 by mesoporous bioglass/silk fibrin scaffolds for the repair of osteoporotic defects.** *Biomaterials*
Zhang, Y., Cheng, N., Miron, R., Shi, B., Cheng, X.
2012; 33 (28): 6698–6708
- **Randomized controlled trial on fluoride varnish application for treatment of white spot lesion after fixed orthodontic treatment.** *Clinical oral investigations*
Du, M., Cheng, N., Tai, B., Jiang, H., Li, J., Bian, Z.
2012; 16 (2): 463–68
- **Current progress on Zirconia Implant.** *Journal of Oral Science Research*
Cheng, N., Shi, B.
2011; 27 (12): 1115-22
- **Desmoplastic ameloblastoma - A review.** *Oral oncology*
Sun, Z. J., Wu, Y. R., Cheng, N., Zwahlen, R. A., Zhao, Y. F.
2009; 45 (9): 752–59
- **Radio-protective effect of Fucoïdan on radiation damaged testis tissue in male rats.** *J Postgrad Wuhan Univ-Medicines Edition*
Cheng, N., Wu, Y., Zheng, Y., Ren, S., Luo, Q.
2008; 24 (1): 1-15

PRESENTATIONS

- Nanoparticle-incorporated STING activator as an immunotherapeutic for PD-L1 resistant triple-negative breast cancer - 2018 Carolina Center of Cancer Nanotechnology Excellence (CCNE) Site Visit
- Nanoparticle-incorporated STING activator as an immunotherapeutic for PD-L1 resistant triple-negative breast cancer - 2018 Duke Innate Immunity Symposium
- Nanoparticle-incorporated STING activator as an immunotherapeutic for PD-L1 resistant triple-negative breast cancer. - 2018 AACR Annual Meeting.
- Nanoparticle-incorporated STING activator as an immunotherapeutic for PD-L1 resistant triple-negative breast cancer. - 2018 Dental Research in Review Day, UNC-CH
- Arp2/3 complex disruption in macrophages compromises integrin-dependent processes and leads to hyper-polarization - 2016 The Triangle Cytoskeleton Meeting
- SPLUNC1 Expression in human bronchi tissue and its phosphorylation status in HEK293T cell - 2014 Dental Research in Review Day, UNC-CH
- Porous CaP/Silk composite scaffolds to repair femur defects in an osteoporotic model - 2013 8th Annual Meeting of Chinese Stomatology Association (CSA)- Annual National Congress of Implant Dentistry