

Examples of Collaborations of Participating Primary Mentor Faculty with Other T32 Faculty

T32 faculty cohesion is evidenced by interactions of our faculty (cited in the Table and illustrative publications below).

Table. Examples of collaborations of the Participating Primary Mentor Faculty

1 ⁰ Mentor	Faculty Collaborator (eg, publications, grants)	1 ⁰ Mentor	Faculty Collaborator (eg, publications, grants)
Broide	Corr, Firestein, Karin, Raz	Ix	Firestein, Hughes-Austin, Terkeltaub
Bottini ^{1,2,3,6}	Corr, Firestein, Guma, Kronenberg, Liu-Bryan, Raz	Karin ⁹	Glass, Guma, Firestein, Hoffman, Ideker, Raz
Burns	Hoffman	Kronenberg ¹⁰	Altman, Bottini, Liu, Peters, Ware
Chambers	LaCroix, Kavanaugh	LaCroix	Kado, Salem, Terkeltaub
Corr ^{1,3} (EC Member)	Bottini, Firestein, Guma, Hoffman, Karin, Kronenberg, Liu-Bryan, Stanford, Yaksh	E Raz	Bottini, Broide, Corr, Firestein
Engler ⁸	Firestein, Ward	Terkeltaub	Ginsberg, Guma, Ix, LaCroix, Liu-Bryan, Messer, Salem, Wang,
Firestein ^{1,3,5,6,9}	Bottini, Broide, Ceponis, Engler, Guma, Kavanaugh, Kalunian, Karin, Messer, Raz, Wang, Ward, Yaksh	Wang ^{2,5}	Firestein, Terkeltaub
Ginsberg ⁷	Cantor, Gingras, Hoffman, Ley, Terkeltaub	Ward ⁸	Engler, Firestein, Hughes-Austin
Hoffman ⁴	Burns, Corr, Firestein, Karin, Liu-Bryan, Raz	Yaksh	Corr, Firestein, Liu-Bryan

Ten Illustrative 2014-16 Collaborative Publications of T32 Faculty (papers from 1⁰ mentors):

2016 LEE HOWLEY PRIZE-WINNER FOR RESEARCH IN ARTHRITIS.

- Doody KM, Stanford SM, Sacchetti C, Svensson MN, Coles CH, Mitakidis N, Kiosses WB, Bartok B, Fos C, Cory E, Sah RL, Liu-Bryan R, Boyle DL, Arnett HA, Mustelin T, Corr M, Esko JD, Tremblay ML, Firestein GS, Aricescu AR, Bottini N. [Targeting phosphatase-dependent proteoglycan switch for rheumatoid arthritis therapy.](#) *Sci Transl Med.* 2015;7:288ra76.
- Maeshima K, Stanford SM, Hammaker D, Sacchetti C, Zeng LF, Ai R, Zhang V, Boyle DL, Aleman Muench GR, Feng GS, Whitaker JW, Zhang ZY, Wang W, Bottini N, Firestein GS. [Abnormal PTPN11 enhancer methylation promotes rheumatoid arthritis fibroblast-like synoviocyte aggressiveness and joint inflammation.](#) *JCI Insight.* 2016;1(7). pii: e86580.
- Stanford SM, Svensson MN, Sacchetti C, Pilo CA, Wu DJ, Kiosses WB, Hellvard A, Bergum B, Muench GR, Elly C, Liu YC, den Hertog J, Elson A, Sap J, Mydel P, Boyle DL, Corr M, Firestein GS, Bottini N. [Receptor Protein Tyrosine Phosphatase \$\alpha\$ -Mediated Enhancement of Rheumatoid Synovial Fibroblast Signaling and Promotion of Arthritis in Mice.](#) *Arthritis Rheumatol.* 2016;68:359-69.
- Zhong Z, Umemura A, Sanchez-Lopez E, Liang S, Wong J, He F, Boassa D, Perkins G, Ali SR, McGeough MD, Ellisman MH, Seki E, Gustafsson AB, Hoffman HM, Diaz-Meco MT, Moscat J, Karin M. [NF- \$\kappa\$ B Restricts Inflammasome Activation via Elimination of Damaged Mitochondria.](#) *Cell.* 2016; 164:896-910.
- Ai R, Hammaker D, Boyle DL, Morgan R, Walsh AM, Fan S, Firestein GS, Wang W. [Joint-specific DNA methylation and transcriptome signatures in rheumatoid arthritis identify distinct pathogenic](#)

[processes](#). Nat Commun. 2016;7:11849.

6. Stanford SM, Aleman Muench GR, Bartok B, Sacchetti C, Kiosses WB, Sharma J, Maestre MF, Bottini M, Mustelin T, Boyle DL, Firestein GS, Bottini N. [TGF \$\beta\$ responsive tyrosine phosphatase promotes rheumatoid synovial fibroblast invasiveness](#). Ann Rheum Dis. 2016;75:295-302.
7. Fan Z, McArdle S, Marki A, Mikulski Z, Gutierrez E, Engelhardt B, Deutsch U, Ginsberg M, Groisman A, Ley K. [Neutrophil recruitment limited by high-affinity bent \$\beta\$ 2 integrin binding ligand in cis](#). Nat Commun. 2016;7:12658.
8. Thomas KA, Gibbons MC, Lane JG, Singh A, Ward SR, Engler AJ. [Rotator cuff tear state modulates self-renewal and differentiation capacity of human skeletal muscle progenitor cells](#). J Orthop Res. 2016 Oct 4. doi: 10.1002/jor.23453. [Epub ahead of print].
9. Guma M, Sanchez-Lopez E, Lodi A, Garcia-Carbonell R, Tiziani S, Karin M, Lacal JC, Firestein GS. [Choline kinase inhibition in rheumatoid arthritis](#). Ann Rheum Dis. 2015;74:1399-407.
10. Kong KF, Fu G, Zhang Y, Yokosuka T, Casas J, Canonigo-Balancio AJ, Becart S, Kim G, Yates JR 3rd, Kronenberg M, Saito T, Gascoigne NR, Altman A. [Protein kinase C- \$\eta\$ controls CTLA-4-mediated regulatory T cell function](#). Nat Immunol. 2014; 15:465-72.