Legends for Supplemental Movies

Movie 1. Sperm cause dispersion of cumulus cells due to their hyaluronidase in control COCs.
COCs were incubated with medium only for 3 h, and then incubated with sperm for 1 h, and cumulus cell scattering was examined. Note that sperm pass between dispersed cumulus cells with a slight contact. Four different sperm are shown.

Movie 2. CCL7 treatment results in the formation of cumulus cell clusters and irreversible adhesion of sperm to the cumulus cell surface.
COCs were incubated with 100 ng/ml CCL7 for 3 h, and then incubated with sperm for 1 h, and cumulus cell scattering was examined. Note that most cumulus cells still retained clusters. Cumulus cell masses were accompanied by a number of motile sperm with their heads adhered to the cumulus ECM, and the adhesion appeared steady and irreversible. These phenomena were observed also in the *Ptger2*$^{-/-}$ COCs. Four different fields are shown.

Movie 3. EP2 deficiency results in the formation of cumulus cell clusters and irreversible adhesion of sperm to the cumulus cell surface.
The *Ptger2*$^{-/-}$ COCs were incubated with sperm for 1 h, and cumulus cell scattering was examined. Four different fields are shown.

Movies 4-6. The effect of CCL7 was reversed by treatment with vMIP-II, Y27632 or blebbistatin.
Incubation of COCs with CCL7 was performed in the presence of either 1 μg/ml vMIP-II (Movie 4), 10 μM Y27632 (Movie 5), or 100 μM blebbistatin (Movie 6). Note that sperm pass between the dispersed cumulus cells with a slight contact as observed in the control COCs. Four different sperm are shown for each treatment.