

Multi-Domain Finite Element Meshing for Parotid Acinar Cell Modeling and Simulation

Iteration evolution result data

cell	0	1	2	3	4	5	6	7	8	9	10
1	0.9837	0.7466	0.5595	0.4472	0.3726	0.3201	0.2814	0.2520	0.2289	0.2105	0.1955
2	1.0143	0.7216	0.5146	0.4141	0.3559	0.3177	0.2906	0.2702	0.2543	0.2414	0.2309
3	1.0620	0.7552	0.5703	0.4641	0.3963	0.3501	0.3169	0.2921	0.2727	0.2571	0.2443
4	1.0402	0.7387	0.5579	0.4552	0.3903	0.3459	0.3135	0.2888	0.2691	0.2529	0.2394
5	1.1262	0.8054	0.5683	0.4418	0.3649	0.3139	0.2782	0.2524	0.2331	0.2184	0.2070
6	1.0739	0.7598	0.5541	0.4453	0.3766	0.3286	0.2927	0.2649	0.2428	0.2249	0.2102
7	1.0451	0.7137	0.5396	0.4363	0.3692	0.3226	0.2885	0.2626	0.2422	0.2259	0.2126

Table 1: The evolution of standard deviation of mean surface curvature for the seven cells (in μm^{-1}) after each of ten coupled smoothing iterations.

cell	0	1	2	3	4	5	6	7	8	9	10
1	628.64	590.17	569.09	559.23	553.53	549.84	547.26	545.37	543.93	542.80	541.90
2	729.06	680.85	657.39	646.44	639.76	635.12	631.65	628.91	626.66	624.77	623.15
3	681.01	638.45	619.64	609.78	603.46	598.93	595.46	592.68	590.37	588.40	586.70
4	712.88	661.36	637.82	626.19	619.08	614.15	610.47	607.57	605.02	603.22	601.52
5	443.18	408.76	393.58	386.72	382.76	380.16	378.30	376.90	375.81	374.92	374.19
6	684.72	636.81	615.75	605.50	599.26	595.00	591.87	589.46	587.55	585.98	584.67
7	627.42	582.15	564.89	555.74	549.94	545.88	542.82	540.42	538.47	536.84	535.46

Table 2: The evolution of surface area for the seven cells (in μm^2) at each coupled smoothing iteration.

cell	0	1	2	3	4	5	6	7	8	9	10
1	1004.3	1004.0	1003.9	1003.9	1003.8	1003.7	1003.7	1003.7	1003.7	1003.7	1003.7
2	1012.4	1011.9	1011.8	1011.8	1011.8	1011.9	1011.9	1012.0	1012.0	1012.1	1012.2
3	1090.2	1089.6	1089.4	1089.3	1089.3	1089.3	1089.4	1089.4	1089.5	1089.5	1089.6
4	1105.7	1105.4	1105.3	1105.3	1105.4	1105.4	1105.5	1105.5	1105.6	1105.6	1105.6
5	492.76	492.75	492.88	492.98	493.05	493.11	493.16	493.20	493.23	493.26	493.29
6	1036.3	1036.2	1036.2	1036.1	1036.1	1036.1	1036.1	1036.1	1036.1	1036.2	1036.2
7	903.99	903.60	903.50	903.53	903.60	903.69	903.78	903.87	903.94	904.01	904.07

Table 3: The evolution of volume for the seven cells (in μm^3) at each coupled smoothing iteration.