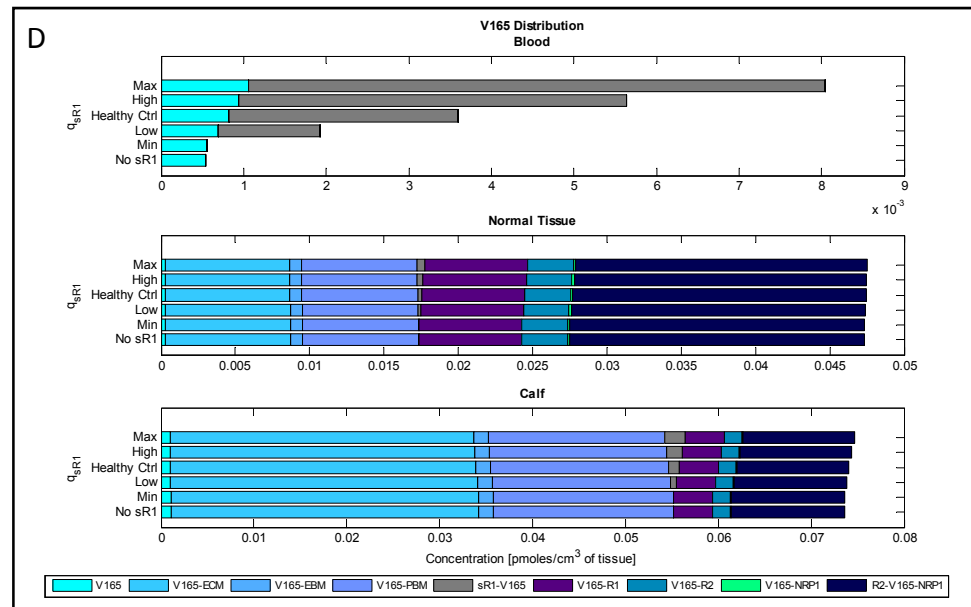
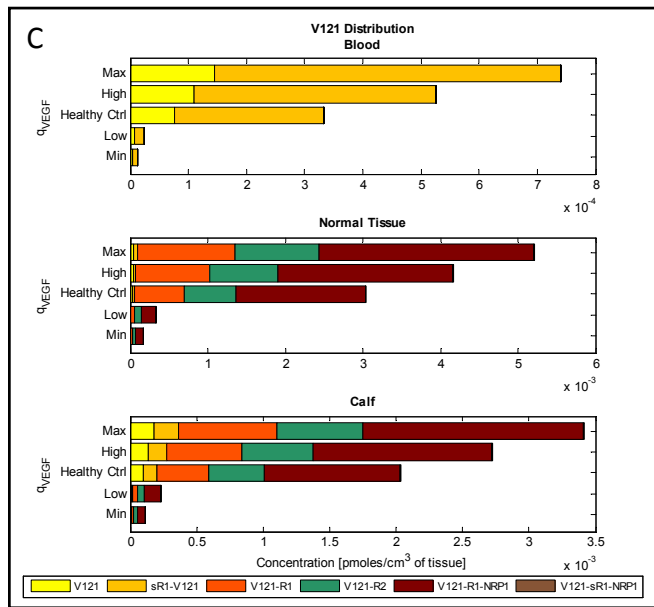
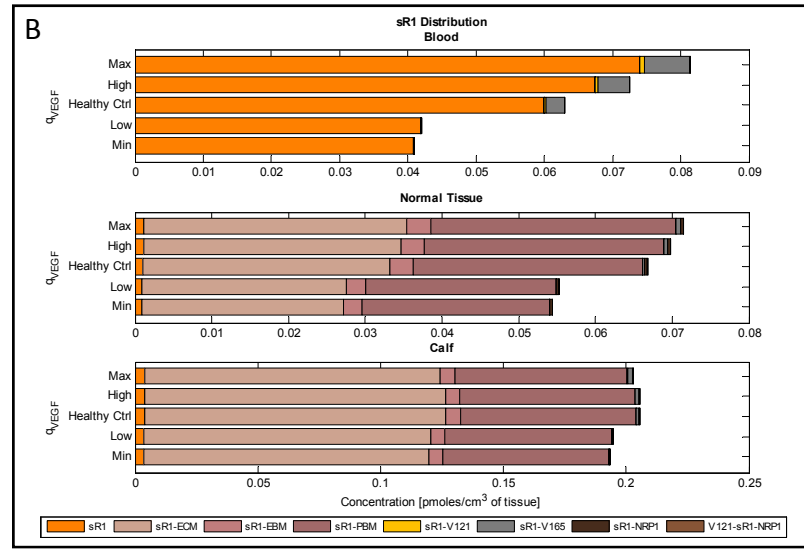
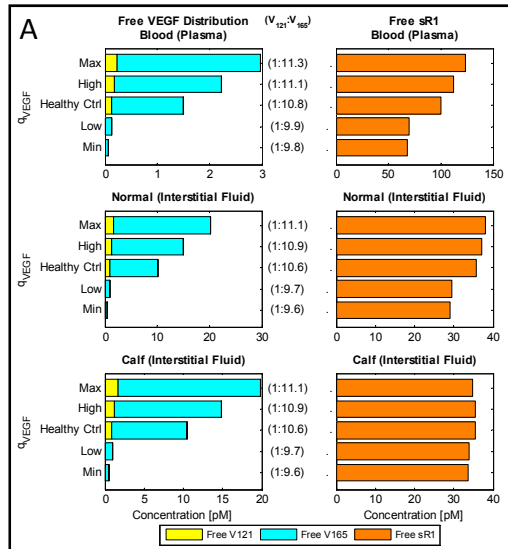
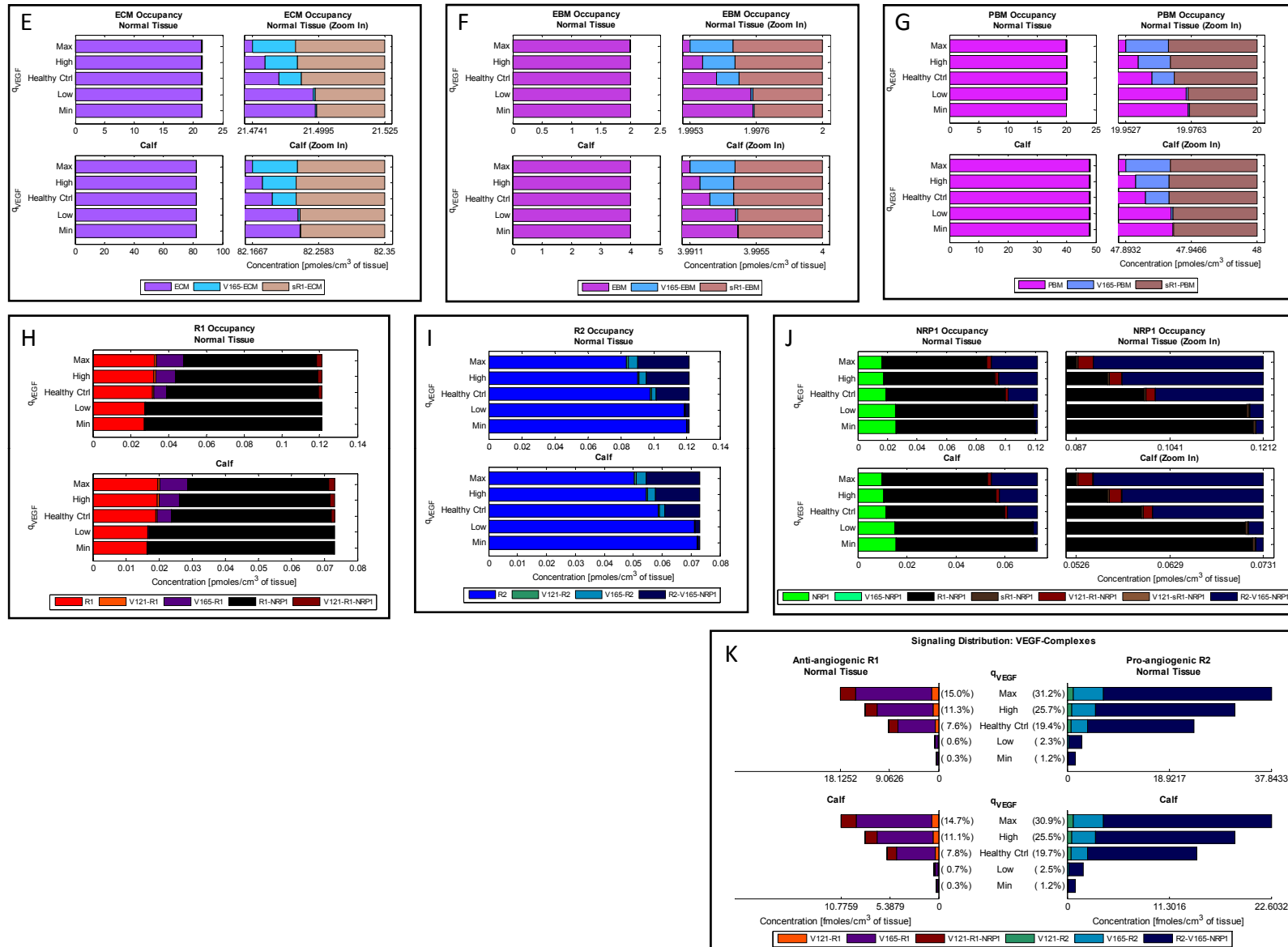


**Healthy Subject: Varying VEGF-secretion rate,  $Q_{TotalVEGF}$  (molecule/MD/s)**

$Q_{VEGF\_Total}$ = $Q_{V121} + Q_{V165}$ @1:10	Normal [ molecule/MD/sec ; mole/(cm <sup>3</sup> tissue)/sec ]	Calf
<b>Max</b>	$3.30 \times 10^{-1}$ ; $1.59 \times 10^{-17}$	$1.93 \times 10^{-1}$ ; $9.55 \times 10^{-18}$
<b>High</b>	$2.64 \times 10^{-1}$ ; $1.27 \times 10^{-17}$	$1.54 \times 10^{-1}$ ; $7.64 \times 10^{-18}$
<b>Healthy Ctrl</b>	$1.93 \times 10^{-1}$ ; $9.28 \times 10^{-18}$	$1.16 \times 10^{-1}$ ; $5.73 \times 10^{-18}$
<b>Low</b>	$2.09 \times 10^{-2}$ ; $1.01 \times 10^{-18}$	$1.32 \times 10^{-2}$ ; $6.55 \times 10^{-19}$
<b>Min</b>	$1.10 \times 10^{-2}$ ; $5.30 \times 10^{-19}$	$6.60 \times 10^{-3}$ ; $3.28 \times 10^{-19}$



**Supplemental Figure S1. Healthy Subject: Complete Molecular Distribution Analysis for Varying VEGF Secretion Rates. (A) Free VEGF and free sVEGFR1 distributions. (B) Total sVEGFR1 distribution. (C) Total VEGF<sub>121</sub> distribution. (D) Total VEGF<sub>165</sub> distribution. (continued on next page)**



### Supplemental Figure S1. (continued)

(E) Extracellular matrix binding site occupancies. (F) Endothelial basement membrane binding site occupancies. (G) Parenchymal basement membrane binding site occupancies. (H) VEGFR1 occupancies. (I) VEGFR2 occupancies. (J) NRP1 occupancies. (K) VEGF-bound VEGFR complexes.