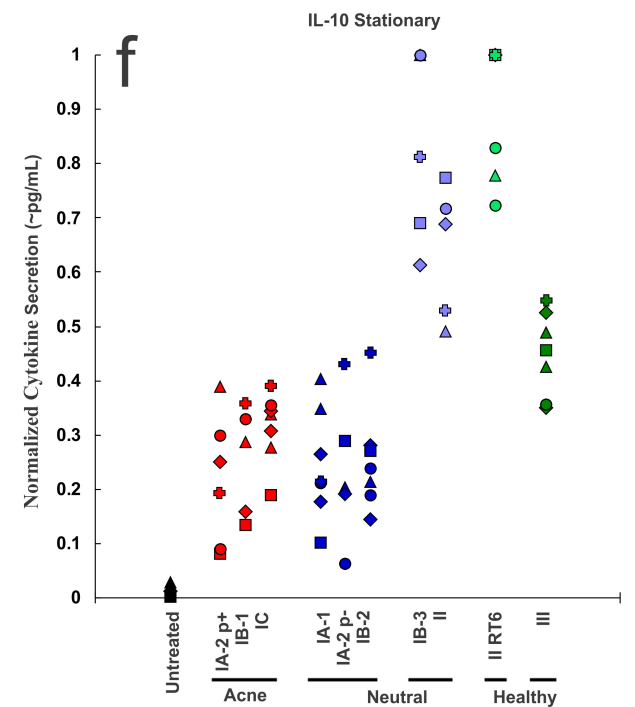
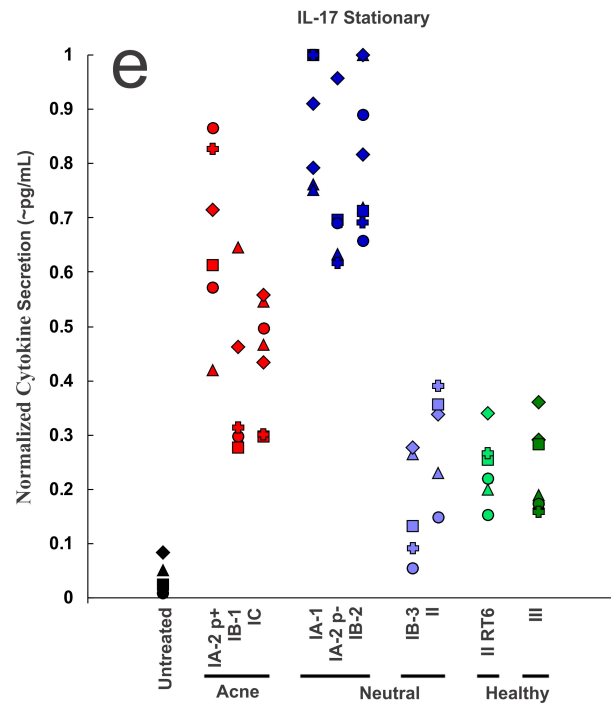
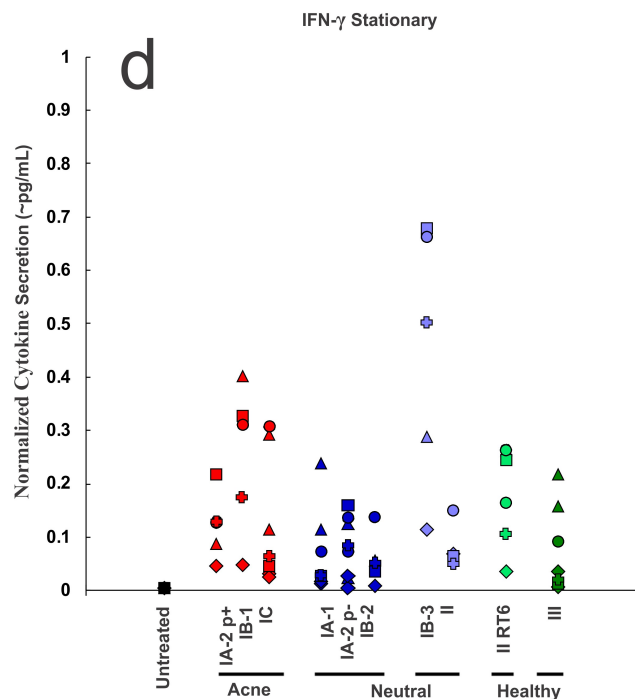
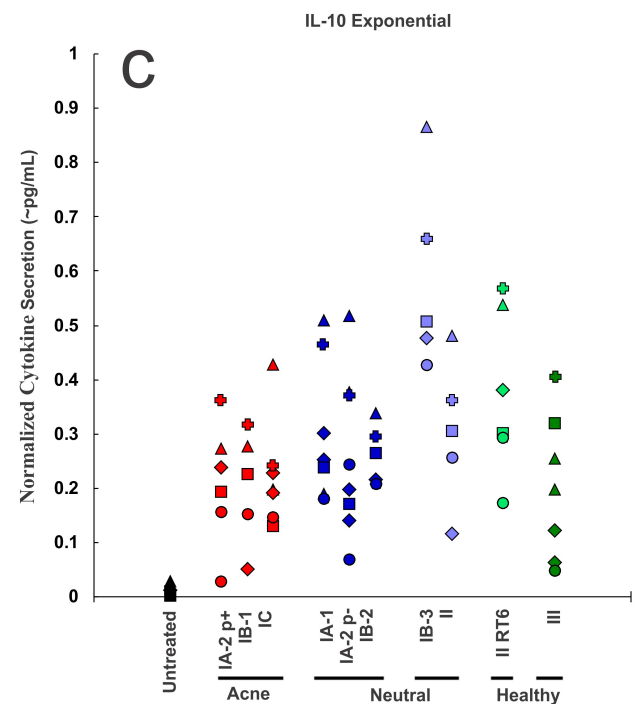
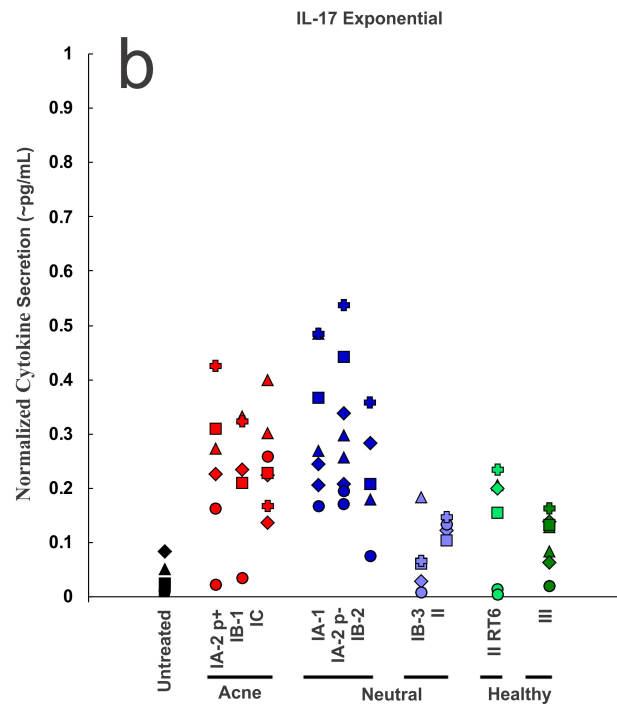
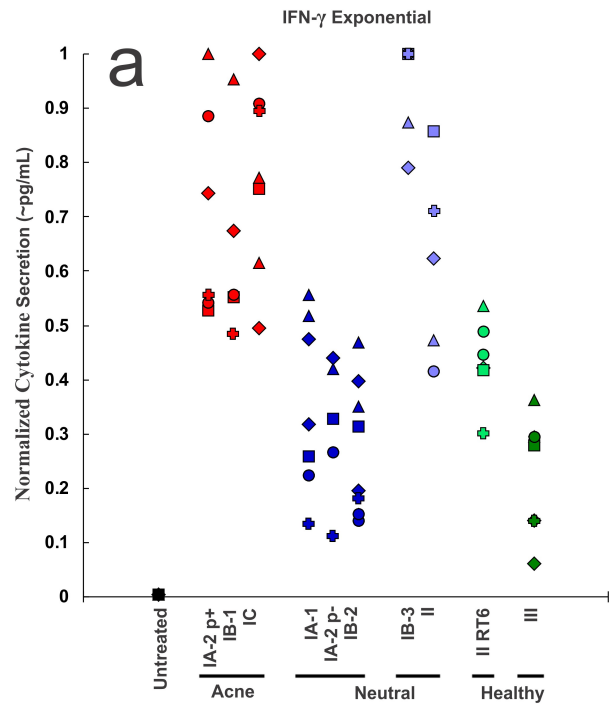


**Figure S1. Cytokine induction patterns of *Propionibacterium acnes* phylotypes in multiple donors.**

2.5x10<sup>6</sup>/mL peripheral blood mononuclear cells were cultured with 2.5x10<sup>6</sup>/mL live *P. acnes* in the (A-C) exponential phase or (D-E) stationary phase for (A, D) IFN- $\gamma$ , (B, E) IL-17, and (C, F) IL-10. ELISA was conducted on the supernatant to determine the concentration of IFN- $\gamma$ , IL-17, and IL-10. The cytokine concentrations normalized to the highest value induced by any *P. acnes* strain for each donor and cytokine. Each donor is represented by a different symbol. RT - Ribotype. p $\pm$  - presence or absence of a large plasmid.



**Table S1. Strains of *Propionibacterium acnes* used in this study**

<b>Strain</b>	<b>Phylotype</b>	<b>Ribotype</b>	<b>MLST<sub>4</sub></b>
HL005PA2, HL036PA1, HL063PA1	IA-1	1 Neutral	IA <sub>1</sub> (CC1) Acne
SK137 ATCC 6919	IA-2 (p-)	1 Neutral	IA <sub>1</sub> (CC3) Acne
HL005PA1, HL043PA1, HL096PA1	IA-2 (p+)	4,5 Acne	IA <sub>1</sub> (CC3) Acne
HL110PA1, HL053PA2	IB-1	8 Acne	IA <sub>1</sub> (CC4) Acne
HL013PA1, HL067PA1, HL059PA1, HL059PA2	IB-2	3 Neutral	IA <sub>2</sub> Eye Infection
HL030PA1, KPA171202	IB-3	1 Neutral	IB Medical Device and Tissue Infections
PRP38, 5-1-3, 5-1-5	IC	5 Acne	IC Acne
HL001PA1, HL060PA1	II	2 Neutral	II Medical Device and Blood Infections
HL042PA3, HL110PA3, HL110PA4	II	6 Healthy Skin	II (ST7) Medical Device and Blood Infections
ASN12, 12S, 2-4	III	N/A	III Healthy Skin and Spinal Disc Infection

Phylotype and ribotype are from Fitz-Gibbon *et al.*, 2013 and Tomida *et al.*, 2013. Ribotype shows only the major ribotype(s) of the phylotype and only skin disease association. p+ and p- designate the possession of a large plasmid or lack thereof for phylotype IA-2 strains. Multi-Locus Sequence Typing (MLST<sub>4</sub>) phylotypes are from McDowell *et al.*, 2014, in which disease association is for the entire phylotype (CC Clonal Complex and ST Sequence Type are displayed for reference). ATCC 6919, 5-1-3, 5-1-5, ASN12, 12S, and 2-4 strain classifications are based on MLST. Others are based on whole-genome sequencing.

**Table S2. Maximum Cytokine Levels in PBMC Experiments**

<b>Donor</b>	<b>IFN-<math>\gamma</math></b>	<b>IL-17</b>	<b>IL-10</b>
1	2225	6612	5167
2	10740	3342	1713
3	7855	3609	4920
4	7926	2019	8938
5	2629	3551	10073

Table shows the maximum cytokine concentration induced by any *P. acnes* strain in pg/mL.