

**EXHIBIT A**

**PFENEX INC.**

**2014 EMPLOYEE STOCK PURCHASE PLAN**

**SUBSCRIPTION AGREEMENT**

\_\_\_\_\_ Original Application

Offering Date: \_\_\_\_\_

\_\_\_\_\_ Change in Payroll Deduction Rate

1. \_\_\_\_\_ hereby elects to participate in the Pfenex Inc. 2014 Employee Stock Purchase Plan (the "Plan") and subscribes to purchase shares of the Company's Common Stock in accordance with this Subscription Agreement and the Plan.

2. I hereby authorize payroll deductions from each paycheck in the amount of \_\_\_\_% of my Compensation on each payday (from 0 to 15%) during the Offering Period in accordance with the Plan. (Please note that no fractional percentages are permitted.)

3. I understand that said payroll deductions will be accumulated for the purchase of shares of Common Stock at the applicable Purchase Price determined in accordance with the Plan. I understand that if I do not withdraw from an Offering Period, any accumulated payroll deductions will be used to automatically exercise my option and purchase Common Stock under the Plan.

4. I have received a copy of the complete Plan and its accompanying prospectus. I understand that my participation in the Plan is in all respects subject to the terms of the Plan.

5. Shares of Common Stock purchased for me under the Plan should be issued in the name(s) of \_\_\_\_\_ (Eligible Employee or Eligible Employee and Spouse only).

6. I understand that if I dispose of any shares received by me pursuant to the Plan within two (2) years after the Offering Date (the first day of the Offering Period during which I purchased such shares) or one (1) year after the Exercise Date, I will be treated for federal income tax purposes as having received ordinary income at the time of such disposition in an amount equal to the excess of the fair market value of the shares at the time such shares were purchased by me over the price that I paid for the shares. I hereby agree to notify the Company in writing within thirty (30) days after the date of any disposition of my shares and I will make adequate provision for federal, state or other tax withholding obligations, if any, which arise upon the disposition of the Common Stock. The Company may, but will not be obligated to, withhold from my compensation the amount necessary to meet any applicable withholding obligation including any withholding necessary to make available to the Company any tax deductions or benefits attributable to sale or early disposition of Common Stock by me. If I dispose of such shares at any time after the expiration of the two (2) year and one (1) year holding periods, I understand that I will be treated for federal income tax purposes as having received income only at the time of such disposition, and that such income will be taxed as ordinary income only to the extent of an amount equal to the lesser of (a) the excess of the fair market value of the shares at the time of such disposition over the purchase price which I paid for the shares, or (b) 15% of the fair market

value of the shares on the first day of the Offering Period. The remainder of the gain, if any, recognized on such disposition will be taxed as capital gain.

7. I hereby agree to be bound by the terms of the Plan. The effectiveness of this Subscription Agreement is dependent upon my eligibility to participate in the Plan.

Employee's Social

Security Number:

\_\_\_\_\_

Employee's Address:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

I UNDERSTAND THAT THIS SUBSCRIPTION AGREEMENT WILL REMAIN IN EFFECT THROUGHOUT SUCCESSIVE OFFERING PERIODS UNLESS TERMINATED BY ME.

Dated: \_\_\_\_\_

\_\_\_\_\_  
Signature of Employee