J. B. Hibbs, Jr., C. Westenfelder, R. Taintor, Z. Vavrin, C. Kablitz, R. L. Baranowski, J. H. Ward, R. L. Menlove, M. P. McMurry, J. P. Kushner, and W. E. Samlowski.

The Journal of Clinical Investigation. Volume 89, No. 3, March 1992.

Page 868.

Figure 1 has been revised to look as follows:

[1] 
$$H_2^{15}N^+$$
  $^{15}NH_2$   $H_2^{15}N$  O  $^{14}C$   $N H$   $+ O_2$   $+ ^{15}NO$   $N H_3^+$   $N H_3^+$   $N H_3^+$   $N H_3^+$   $N H_3^+$   $N H_3^+$   $N H_3^+$ 

[2] 
$$2^{15}NO + O_2 \rightarrow 2^{15}NO_2$$

[3] 
$$2^{15}NO_2 + H_2O \rightarrow {}^{15}NO_2^- + {}^{15}NO_3^- + 2H^+$$

[4] 
$$2^{15}NO + enzyme$$
 [4Fe-4S]  $\rightarrow$  enzyme Fe S  $^{15}N = O$ 

[5] 
$$4HbO_2 + 4NO_2^- + 4H^+ \rightarrow 4Hb^+ + 4NO_3^- + O_2 + 2H_2O$$

Page 869.

Lines 38-39 in the left-hand column should read:

 $NO_3^-$  in the filtrate was reduced to  $NO_2^-$  by mixing 80  $\mu$ l with 80  $\mu$ l E. coli  $NO_3^-$  reductase suspension prepared and then incubated for 1 h at 37°C.

Figure 1. Precursor and products of the biological synthesis of inorganic nitrogen oxides and L-citrulline from L-arginine. 15N-containing products derived from L-[15N]arginine were identified by GC/MS (13-15, 30) electron paramagnetic resonance spectroscopy (21, 22) except for nitrogen dioxide (NO2), which was detected by another method (13). The direct synthesis of L-citrulline from L-arginine has been identified with several techniques (12-15, 58). The experiments utilizing L-[guanidino-<sup>14</sup>C]arginine (13, 58) are illustrated in the figure. NO formed by reaction [1] can undergo oxidative degradation in aqueous solution (reactions [2] and [3] or react with nonheme iron associated with sulfur atoms to form nitrosyl-iron-sulfur complexes (reaction [4]). Although not shown, certain other forms of intracellular iron also complex with NO. (Hibbs et al., unpublished data). NO2 entering the vascular system reacts rapidly with oxyhemoglobin (35). This results in the stoichiometric formation of methemoglobin and NO<sub>3</sub> from oxyhemoglobin and NO<sub>2</sub> (reaction [5]).