CORRECTIONS

X-ray Absorption Studies of the Cu-Dependent Phenylalanine Hydroxylase from Chromobacterium violaceum. Comparison of the Copper Coordination in Oxidized and Dithionite-Reduced Enzymes, by Ninian J. Blackburn,* Richard W. Strange, Robert T. Carr, and Stephen J. Benkovic*, Volume 31, No. 23, June 16, 1992, pages 5298-5303.

Page 5302. The paragraph describing the supplementary material available for this paper is missing. It should read as

Seven tables containing the full parameter sets used in the simulation of the data in Figures 1a-d, 3a-f, and 4a-d, respectively (8 pages). Ordering information is given on any current masthead page.

Partitioning of Tryptophan Side-Chain Analogs between Water and Cyclohexane, by William C. Wimley and Stephen H. White*, Volume 31, Number 51, December 29, 1992, pages 12813-12818.

The partitioning of N-methylindole (NMI) and 3-methylindole (3MI) between water and cyclohexane over a range of temperatures was measured in order to assess the relative contribution of the imine NH group to the free energy of transfer (ΔG) of tryptophan analogs between water and nonpolar phases. We reported that 0.5 water appeared to copartition with each 3MI into cyclohexane on the basis of measurements of ³H₂O concentrations in cyclohexane in the presence and absence of 3MI. A. Radzicka, G. B. Young, and R. Wolfenden [personal communication and Radzicka, A., Young, G. B., & Wolfenden, R. (1993) Biochemistry 32, 6807-6809] have shown that this observation is most likely a result of tritium exchange with the NH proton of 3MI and that no more than 0.1 water can copartition with each 3MI.

Our water-to-cyclohexane partition coefficients for 3MI were adjusted to account for the presumed "hydration" of 3MI by multiplying the total concentration of 3MI in cyclohexane by the "unhydrated" fraction (0.51). This "correction" thus erroneously decreased the apparent partition coefficient by a factor of approximately 2 and thereby caused the water-to-cyclohexane ΔG to be under estimated by RT ln(0.51), which is equivalent to +0.40 kcal/mol at 298 K. Our calculated thermodynamic values were summarized in Table I of the original paper. We present below a revised version of Table I that contains the proper values of the partition coefficients and ΔG 's for 3MI. These changes have no effect on the calculated values of the heat capacities of transfer reported in footnote 2.

Revised Table I: Experimental Data for Water-Cyclohexane Partitioning of 3-Methylindole and N-Methylindole

			ΔG^b	
temperature (K)	K_{v}^a	VF	MF	FH
N-Methylindole				
288	301 ± 13	-3.21	-4.29	-6.88
298	290 ± 15	-3.30	-4.42	-7.15
308	274 ± 12	-3.37	-4.54	-7.42
318	265 ± 10	-3.46	-4.67	-7.69
328	231 ± 12	-3.48	-4.73	-7.87
3-Methylindole				
281	33.4 ± 0.9	-1.91	-2.95	-5.45
288	36.4 ± 0.9	-2.00	-3.08	-5.67
298	37.4 ± 1.4	-2.09	-3.21	-5.94
308	38.5 ± 1.4	-2.16	-3.34	-6.20
318	39.0 ± 1.4	-2.25	-3.46	-6.48
328	37.7 ± 2.1	-2.30	-3.55	-6.72

^a Uncorrected mole-fraction partition coefficients, equal to the ratios of the molar concentration of the probe in cyclohexane to water. b Free energies are in kilocalories per mole calculated using volume-fraction (VF), mole-fraction (MF), and Flory-Huggins-corrected volume-fraction partition coefficients (FH).

These revisions increase the values of ΔS for 3MI waterto-cyclohexane transfer by only 1.3 cal/(mol·K) (Table II). This change is within experimental error and therefore does not alter our conclusion that entropy changes for 3MI and NMI are indistinguishable. The only significant change in the thermodynamic data is that the difference in transfer free energy ($\Delta \Delta G = \Delta \Delta H$) between 3MI and NMI is now only 1.20 ± 0.02 kcal/mol instead of 1.62 ± 0.02 kcal/mol. Thus, the hydrogen bond between the indole NH and water is even weaker than previously thought.

Fourier-Transform Infrared Study of Cyanide Binding to the Fe_{a3}-Cu_B Binuclear Site of Bovine Heart Cytochrome c Oxidase: Implication of the Redox-Linked Conformational Change at the Binuclear Site, by Motonari Tsubaki* and Shinya Yoshikawa, Volume 32, Number 1, January 12, 1993, pages 164-173; and Fourier-Transform Infrared Study of Azide Binding to the Fea3-CuB Binuclear Site of Bovine Heart Cytochrome c Oxidase: New Evidence for a Redox-Linked Conformational Change at the Binuclear Site, by Motonari Tsubaki* and Shinya Yoshikawa, Volume 32, Number 1, January 12, 1993, pages 174-182.

These two papers were submitted and published without the knowledge of Dr. Shinya Yoshikawa. Dr. Yoshikawa disagrees with some of the conclusions reached in the papers and requests that his name be deleted as a coauthor.