

## Dr. Yasuhiro Tateishi (Research Fellow)

Research is focused on cytochrome P450 (P450) enzymes and their interactions with cytochrome  $b_5$  ( $b_5$ ). A fluorescent conjugate of a  $b_5$  mutant has been useful in characterizing the interaction of P450 17A1 with  $b_5$ , which is essential for the lyase activity of P450 17A1 (in androgen biosynthesis). Goals include structural analysis of the binding of  $b_5$  and P450 17A1 and searches for selective inhibitors of the lyase reactions of P450 17A1, which may be useful in the treatment of prostate cancer. Interactions of  $b_5$  with other P450s are also being studied.

