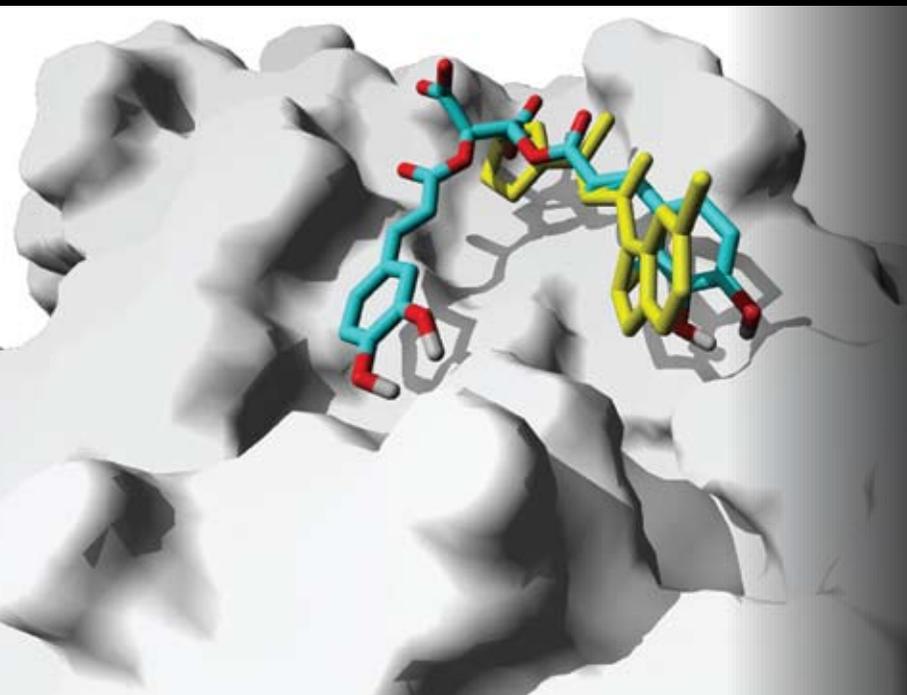


Discovering Collaboratively Working Together to Understand HIV

At St. Edward's University in Austin, Texas, students experience the excitement of collaborative discovery. Science majors and non-majors work on projects that blend research and education across the disciplines. Three student-faculty teams work on the problem of emerging HIV drug resistance. Each team approaches the work from one of three perspectives - modeling, molecular biology, or bioinformatics. Just two years into the project, the students have already published their findings. In conjunction with their intense periods of summer research, the teams are also developing discovery-based curricular modules that are gradually being integrated into the general science curriculum. Once this model is proven, the research focus will shift to other diseases to create a signature, self-sustaining collaborative program for undergraduate education.



A small molecule drug candidate I-chicoric acid docks with HIV-1 integrase, blocking its ability to integrate HIV's viral DNA into the host genome.



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Page 16: 3D structure of *glmS* determined by Daniel Klein and Adrian Ferré-D'Amaré

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