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Teaching Crystallography to Biologists. Jenny P. Glusker, The Inst. for Cancer Research, Fox Chase Cancer Center and Philadelphia Univ., Philadelphia, PA.

Efforts to expose non-chemists to the general principles of macromolecular crystallography will be described. Course contents from IUCr Teaching Commission Schools and from lectures to medical students will be presented. Items include electron-density maps (their relationship to reality and the effects of data resolution), Patterson and direct methods, the models used to obtain the crystal structure, and the meaning of error estimates. Also described will be some aspects of anomalous dispersion and macromolecular neutron diffraction. It is our aim to help the student better understand the nature of Fourier transforms and other mathematical expressions and their relationship to the final structures.

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