

**C**omputation and **I**nformatics in **B**iology and **M**edicine  
Training Program

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***Personal Genome and  
Synthetic Biology Projects***

***Abstract:***

The apparently insatiable appetite for knowledge of human/bio-diversity, conserved regions, cancer profiles, etc. is driving genome/RNA sequencing technology from current 100bp/\$ to Mbp/\$ soon (e.g. the polymerase colony methods). To turn the computational-genomics hypotheses deluge into a testing jamboree, we need to synthesize thousands of engineered motifs and custom genes using DNA chips with error correction. We can also now design custom drug-mediated degradation of proteins for time-series data. With these tools we explore causative mechanisms of variant combinations in existing populations, as well as engineer useful, novel proteins, peptidomimetics, gene circuits, and cells. See: <http://arep.med.harvard.edu>

*(Seminar of the Genome Center of Wisconsin  
Fall 2004 Seminar Series)*

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**Wednesday, October 6th  
12:00 p.m.**

Genetics/Biotechnology Center Auditorium  
425 Henry Mall