Gordon research conference program

Bioorganic chemistry
June 15–20, 1997
Proctor Academy, NH
John Griffin and Anthony Czarnik, Chairs

Drug resistance, targets and strategies
Richard Thompson (Eli Lilly), Carolyn Bertozzi (UC Berkeley), Discussion leaders
Stuart Levy (Tufts): Problems and opportunities presented by antibiotic-resistant microbes
Dudley Williams (Cambridge): Glycopeptide antibiotics: structures and mode of action
Dan Littman (Skirball Institute, NYU): Interactions of HIV envelopes with chemokine receptors
David van Vranken (UC Irvine): New enzyme inhibitors and peptide mimetics
Shahriar Mobashery (Wayne State): Evolution of the versatile β-lactam hydrolase activity: from biosynthetic enzymes to drug resistance factors
Kevin Judice (Genentech): Small-molecule inhibitors of protein–protein binding interactions

Molecular diversity
Alan Schwabacher (Wisconsin-Milwaukee), Discussion leader
Stephen Kaldor (Eli Lilly): New combinatorial chemistry methods for pharmaceutical lead generation and optimization
Jeremy Minshull (Maxogen): Functional evolution of enzymes and pathways by DNA shuffling
Klaus Gubernator (Roche Basel): 3D-structure guided evolutionary discovery of bioactive molecules

New methods
Richard Cummings (Merck), Discussion leader
Joe Loo (Parke-Davis): Using mass spectrometry to study protein–DNA/RNA interactions
Yen-Ho Chu (Ohio State): Affinity capillary electrophoresis
Robert Flowers (Takeda): Calorimetric investigations of biologically relevant reaction mechanisms
Peter Schuck (NIH): Determination of binding affinity and kinetics using evanescent wave biosensors

Nucleic acids and genomics
Christine Chow (Wayne State), Discussion leader
Brian Metcalfe (SmithKline Beecham): The impact of genomics on bioorganic chemistry
Paul Schimmel (MIT): RNA-dependent amino acid recognition in translational editing
Hiroshi Sugiyama (Tokyo): Molecular basis of atom-specific DNA modification

Enzymes and mechanisms
K. Shokat (Princeton), P. Petillo (Illinois), Discussion leaders
Alan Fersht (Cambridge): Protein folding
Dale Drueckhammer (Stanford): Coenzyme A analogs as probes of enzyme-catalyzed reactions
Ron Raines (Wisconsin): Catalysis of oxidative protein folding in vitro and in vivo
Ikuo Fujii (Osaka): Evolving catalytic antibodies in phage-displayed combinatorial libraries
Recognition and mimesis
T. Wandless (Stanford), B. Carter (Toledo), Discussion leader

Carlos Barbas (Scripps):
Structure and mechanism of aldolase catalytic antibodies: programming covalent catalysis

Kurt Deshayes (Bowling Green):
Using host–guest chemistry to separate rates of energy transfer from the rate of diffusion

Linda Jolliffe (Johnson & Johnson):
Progress towards development of small molecule mimetics of erythropoietin

Lia Addadi (Weizmann Institute):
Antibody recognition of molecular organization at specific crystal surfaces

Marc Snapper (Boston College):
Ilimquinone: A new tool for probing intracellular vesicular trafficking

Plan now to attend. Look for applications material and guidelines in the February issue of Science featuring the 1997 Summer Gordon Conference. Applications may also be submitted via the GRC web site: http://www.grc.uri.edu. For further information, please contact:

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