Committee on Faculty Research Lectureship Named Lecturers for 2005-06

To the Academic Senate, Los Angeles Division:

The annual UCLA Faculty Research Lectures honor our university’s most distinguished scholars in science, the arts, humanities and social disciplines while presenting to our academic community and to the public two superb lecturers. The Committee has named Professor Eli Yablonovitch from the Department of Electrical Engineering and Professor Karen Orren from the Department of Political Science as the next UCLA Faculty Research Lecturers. Our faculty, students and staff, as well as the public, will be given a chance to hear two outstanding scholars share their research and personal perspectives. The Committee is pleased to present Professors Yablonovitch and Orren as Faculty Research Lecturers in 2005-2006.

Professor Eli Yablonovitch as the 99th Faculty Research Lecturer in 2005-2006.

Over the course of three decades, UCLA Professor Eli Yablonovitch, of the Department of Electrical Engineering, has done pioneering research in many fields, including nonlinear optics, laser-plasma interactions, strained quantum-well lasers, and the chemical modification of semiconductor surfaces. Early in his career he invented the Optical-Free-Induction-Decay generator. He also introduced the term “energy fluence” for the controlling parameter in infrared-laser-induced chemistry, and he promoted the thermal model of such chemical reactions, despite considerable initial opposition.

Beyond these early seminal contributions, Professor Yablonovitch is credited with having established the entirely new field of quantum optics, making lasting contributions that hold major implications for the development of all-optical signal processing in telecommunications. He made the first photonic crystal with a 3D forbidden band gap, often called Yablonovite, the electromagnetic analog of an electronic semiconductor. These innovations have had far-reaching scientific and practical consequences: his advances in the area of semiconductor lasers now inform nearly all telecommunications lasers, laser pointers, and DVD players, while the field of photonic band gaps has grown into one in which at least 900 papers are published annually. In addition to his other responsibilities, Prof. Yablonovitch serves as Director of UCLA’s Center for Nanoscience Innovation for Defense (CNID), which is funded by the Defense Advanced Research Project Agency (DARPA) and the Defense MicroElectronics Activity (DMEA).

During his thirteen years at UCLA, Professor Yablonovitch has been an excellent communicator on scientific topics, both to his appreciative students and to the public at large. For his extensive contributions in nonlinear optics, photonic crystals, and photonic bandgap materials, Professor Yablonovitch was elected to both the National Academy of Engineering and the National Academy of Science.
in 2004. In naming Professor Yablonovitch its 100th Faculty Lecturer, UCLA welcomes a most distinguished and accomplished faculty member to the podium.

**Professor Karen Orren as the 100th Faculty Research Lecturer in 2005-2006.**

Karen Orren, professor of Political Science, is now at the pinnacle of a long and distinguished career in which she has made major contributions to research on American politics. She has an international reputation for her work on the development, structure and operation of the American polity. She has worked on a wide range of topics including social movements, business corporations, farmers, labor unions, and the implications of these for the operations of law and government. In each area she has opened new avenues for research, and her originality has been rewarded by major prizes.

Professor Orren's overall contribution shows how placing a political question in its broader historical setting, in the push and pull of institutions over time, reveals structural and dynamic properties not evident “or even concealed” in a static or conventional view. In her first book, *Corporate Power and Social Change*, she studied corporate investment in housing over a period of a century to illuminate the range of possible authority relations between government and business and account for the prevailing form. In her second book, *Belated Feudalism*, she overturned the proposition that American history is characterized by the “absence of feudalism,” investigating the labor movement’s prolonged confrontation with the ancient master-and-servant law as one episode within a reformulated analysis of the past and present of American liberal institutions. More recently, her research has been devoted to reconceptualizing constitutional government in terms of the changing “rights” of officeholders.

Some twenty years ago, Professor Orren and a collaborator founded *Studies in American Political Development*, a learned journal that under her co-editorship has until now served as catalyst and resource for an entirely new subfield in political science, “APD,” represented today on the faculty of major political science departments around the country. In *The Search for American Political Development*, published last year, Orren and her co-author provide a guide to studying politics in historical perspective and a searching evaluation of the success of political scientists thus far.

In awarding Professor Karen Orren the faculty research lectureship, we will be recognizing someone who has performed exceptional university service. Since coming to UCLA in 1969, she has served on the Executive Board of the College of Letters and Science, the Legislative Assembly of the Academic Senate, the Council on Academic Personnel, and Senate Committees on Rules and Jurisdiction, Privileges and Tenure, Charges, Planning and Budget, as well as the state wide Committee on Privilege and Tenure.

UCLA will truly be honoring one of its own.
Respectfully submitted,

Michael Allen, English
Joyce Appleby, History, CHAIR
Robert Goldberg, Molecular, Cell & Developmental Biology
Frederick M. Hawthorne, Chemistry & Biochemistry
Leon Knopeff, Physics and Astronomy
Susan McClary, Musicology
Ralph H. Turner, Sociology
Larry S. Zipursky, Biological Chemistry

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