GW Institute for Biomedical Engineering

Colloquia

Optical Biosensors and a Perspective on the Future

By

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Optical biosensors are moving from the laboratory to the point of use. New concepts for molecular recognition, integration of microfluidics and optics, simplified fabrication technologies, systems integration concepts, and public concerns drive this movement. These factors are discussed and examples of innovations are identified that will lead to smaller, faster, cheaper optical biosensors with capacity to provide effective and actionable information. NRL biosensors with different capabilities and at different stages in development will be used to illustrate the factors that are impacting biosensor design for point of use systems.

Bio:
Frances S. Ligler, D.Phil., D.Sc. (Oxford University), is currently the Navy's Senior Scientist for Biosensors and Biomaterials and vice chair of the Bioengineering Section of the National Academy of Engineering. She has published over 300 full-length articles in scientific journals and has 24 issued patents; together they have been cited over 5300 times. She performs research in biosensors, microfluidics, and nanotechnology. In 2003, she was awarded the Homeland Security Award by the Christopher Columbus Foundation and the Presidential Rank of Distinguished Senior Professional by President Bush.

May 11th, *01:00pm-02:00pm; MAE Conference Center,* Room 736 Academic Center

Pizza and refreshments will be served

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