



FLC Northeast Regional Meeting

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March 20, 2007



Presentation Outline

- Overview of BNL
- BNL's Technology Transfer Program
- BNL's Licensing Program



History

- BNL is located in Upton, New York (Long Island) on the former site of the Army's Camp Upton during World War I and II, and opened its doors in 1947

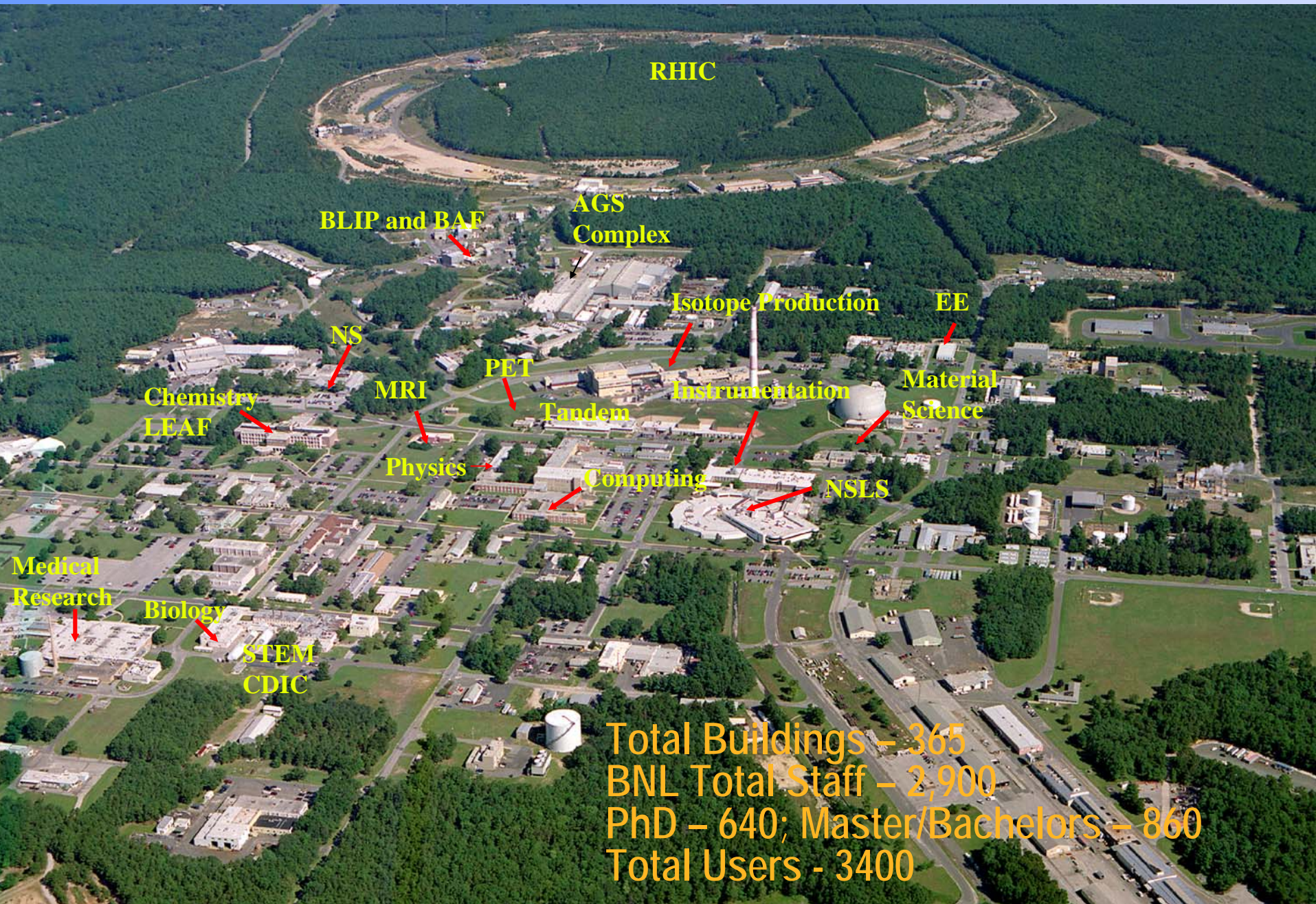


- BNL is owned by the U.S. Department of Energy (DOE) and operated by Brookhaven Science Associates (BSA) under a prime contract
- BSA is a nonprofit organization formed from a partnership of the State University of New York at Stony Brook and the Battelle Memorial Institute

Laboratory Location



Brookhaven National Laboratory



Total Buildings – 365
BNL Total Staff – 2,900
PhD – 640; Master/Bachelors – 860
Total Users - 3400

BROOKHAVEN'S TECHNOLOGY TRANSFER PROGRAM

USER FACILITIES

- contract for use by research teams from industry, university or non-profit of a BNL Designated User Facility

INTELLECTUAL PROPERTY PROTECTION AND LICENSING

- obtain patent protection on BNL developed inventions with commercial applications
- license patents covering BNL developed inventions to industry to foster commercialization

BROOKHAVEN'S TECHNOLOGY TRANSFER PROGRAM

WORK FOR OTHERS

- Non-federal sponsors – contract for research performed by BNL research staff which is fully funded by a utility, university, hospital, state or local government, or non-profit and which utilizes unique BNL expertise
- Other federal agencies-research performed by BNL research staff on behalf of and fully funded by another federal agency, such as DARPA, NIH, NASA. Research performed under an inter-agency agreement between DOE and the other federal agency.

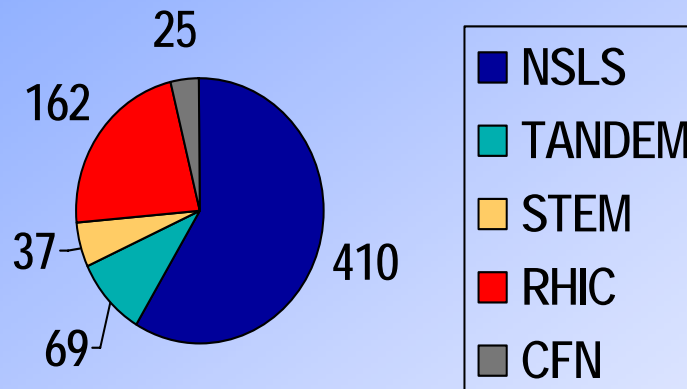
COOPERATIVE RESEARCH AND DEVELOPMENT (CRADAs)

- Contract for collaborative research projects with industry that may be cost-shared or fully funded by industry

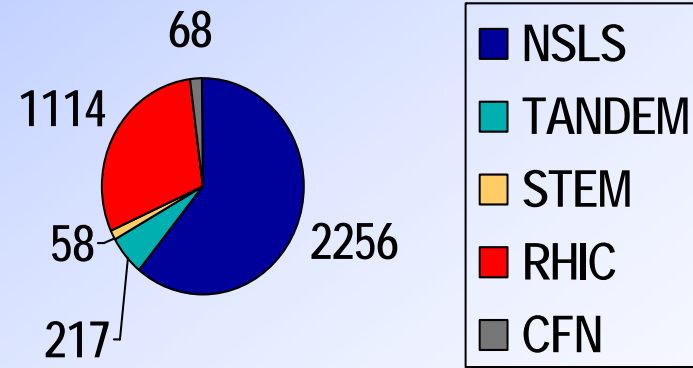
USER FACILITIES

Activity at Major BNL User Facilities

Institutions -



Researchers -



BNL WFO: Other Federal Agencies

<u>Agency</u>	<u>BNL Costs (\$K)</u>	
DOC	565	
DOD	1,696	
DOT	9	
EPA	1,475	
NASA	8,028	
NSF	87	
NIH	12,185	
DOS	3,693	
DHS	2,393	
NRC	<u>10,281</u>	
TOTAL:	\$40,412K	= 8.7% OF LAB BUDGET

Comparative Data: FY '04 \$41,600K - % of Lab Budget = 9.2%

Brookhaven Science Associates
U.S. Department of Energy

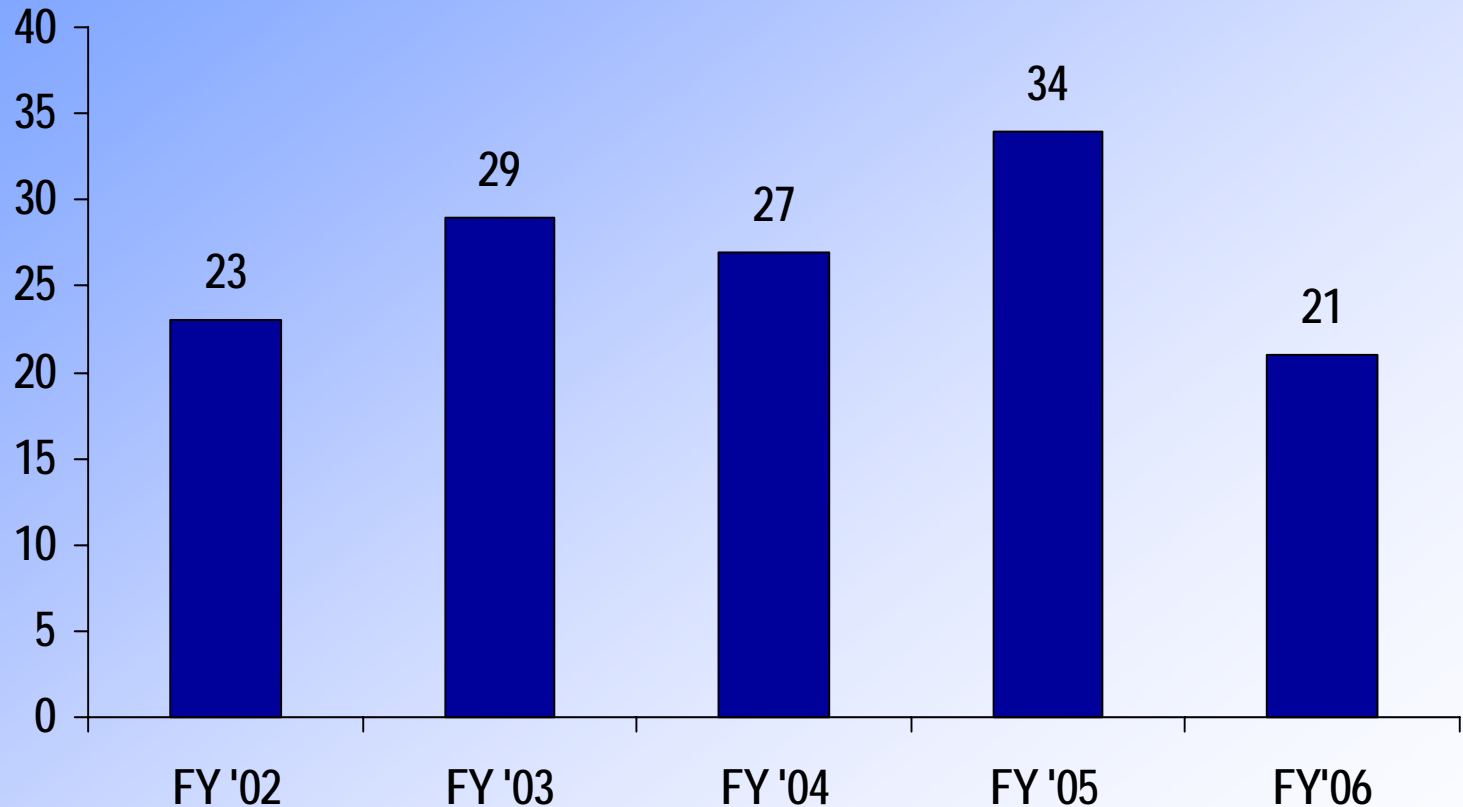


BSA PATENT PORTFOLIO BY TECHNOLOGY AREA

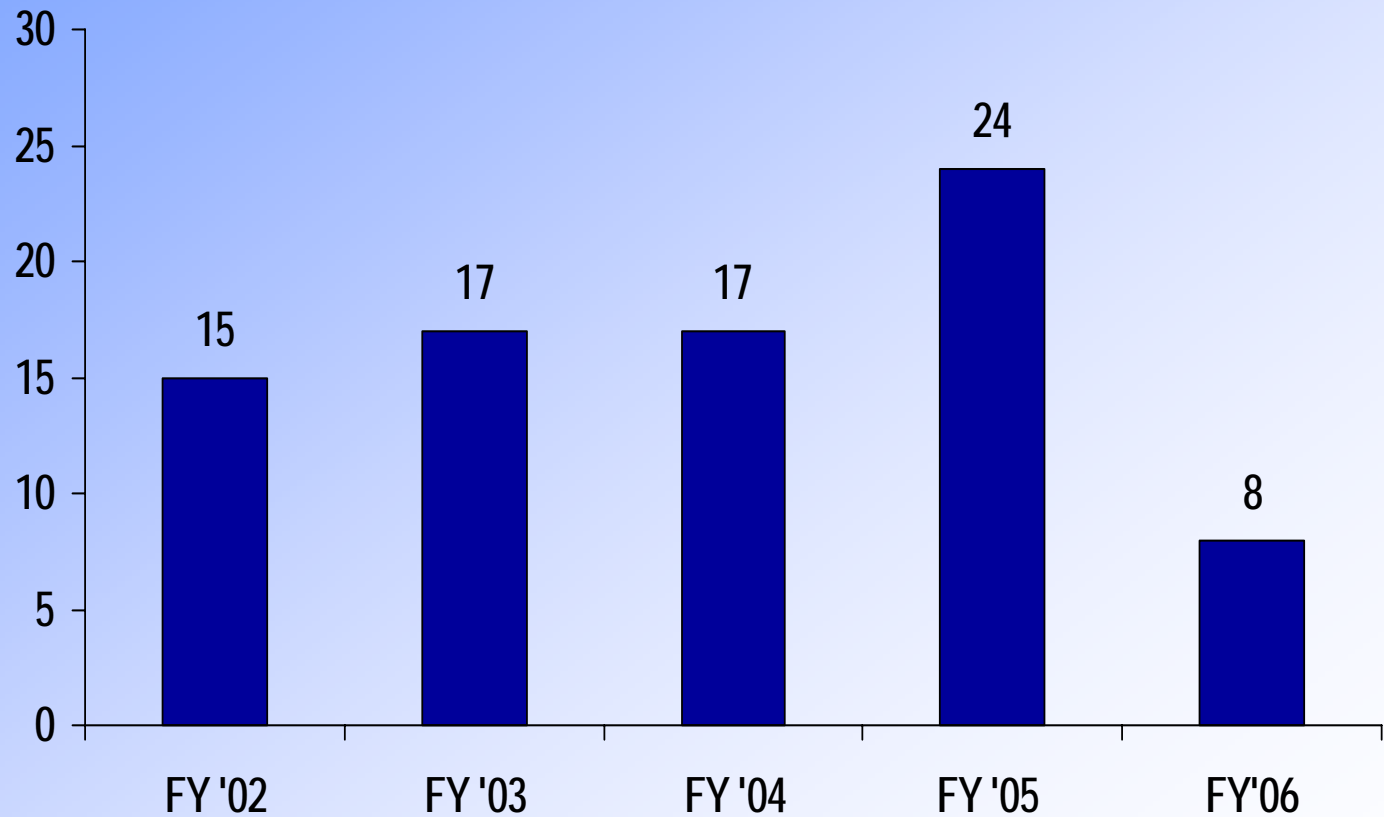
Technology Field	Inventions in Portfolio	Inventions Licensed	Inventions Commercialized
Optics	30	30	30
Molecular Biology	26	13	5
Pharmaceuticals	23	19	3
Instrumentation	19	11	5
Materials	10	0	0
Environmental Technologies	15	8	4
Medical Devices	14	2	2
Catalysts	13	0	0
Electronics	6	4	4
Nanofabrication	3	0	0
Total	159	87	53

11/15/05

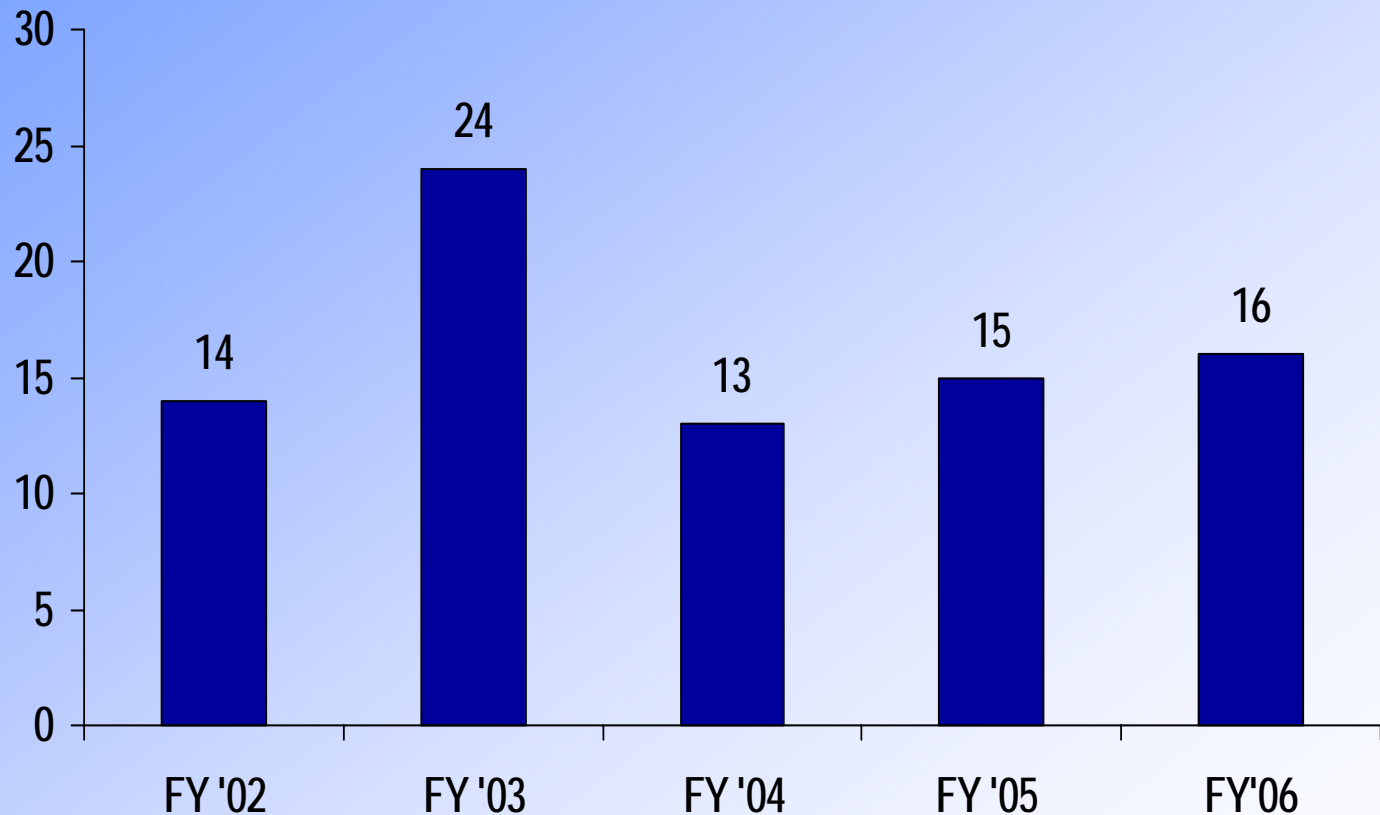
INVENTION DISCLOSURES RECEIVED BY OIP



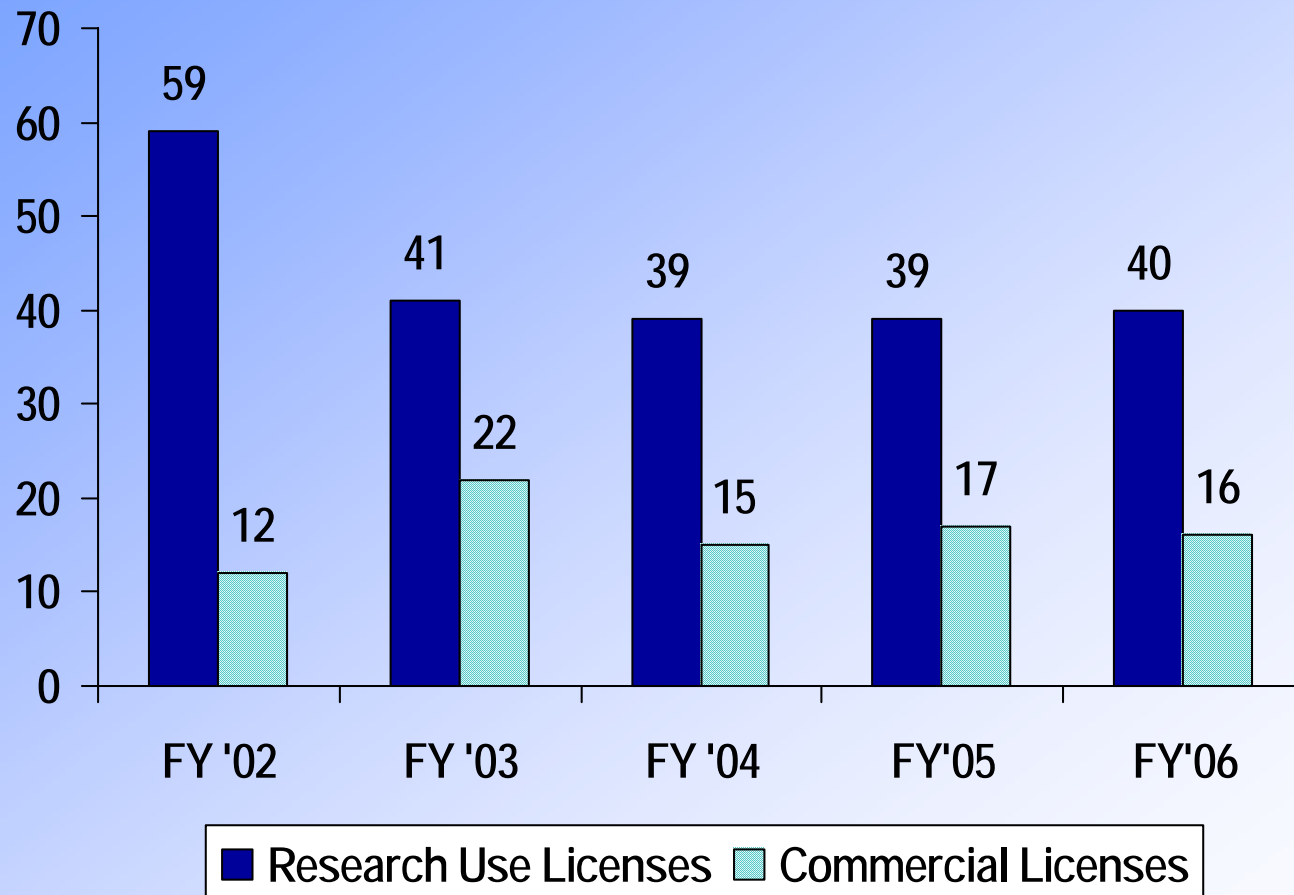
U.S. PATENT APPLICATIONS FILED ON BSA OWNED INVENTIONS



U.S. PATENTS ISSUED ON BSA OWNED INVENTIONS



NEW PATENT LICENSES ISSUED BY OIP



DISTRIBUTION OF PATENT LICENSING INCOME

- Bayh-Dole Act (P.L. 96-517) provides non-profit institutions with the right to take title to and license inventions made with government funding
- Bayh-Dole Act requires that the non-profit institution:
 - Establish a formal licensing income sharing program with inventors
 - Use income remaining after distribution of inventors' share to support missions of the institution
- Bayh-Dole Act provisions incorporated into BSA Prime Contract
- BSA implementation of Prime Contract requirements:
 - BNL has established an income sharing program for inventors
 - BNL develops and obtains prior DOE approval each year of spending plan for use at the Laboratory of all income remaining after distribution of inventors' share

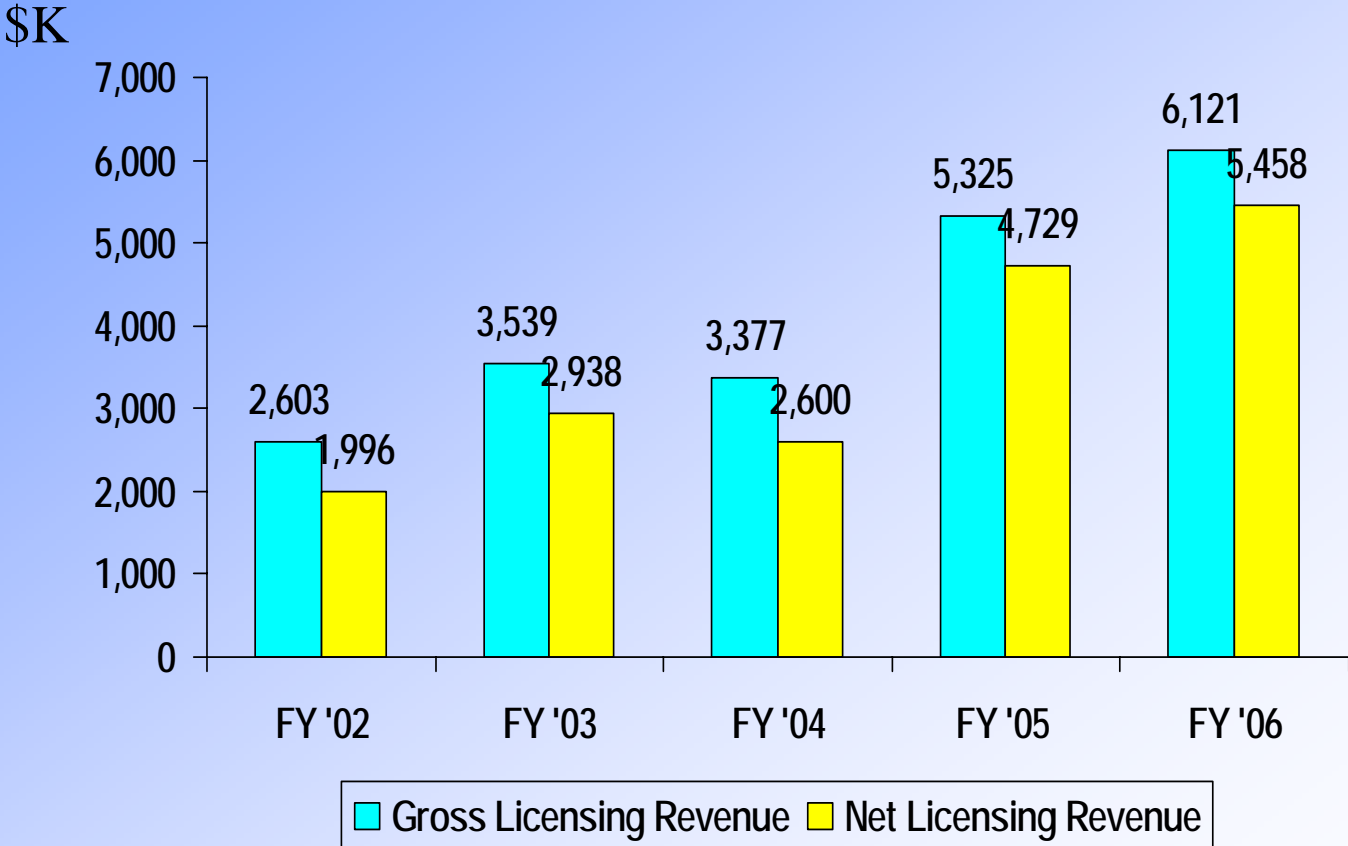
INVENTORS' SHARE OF PATENT LICENSING INCOME

- After all outstanding costs for patent prosecution and licensing have been recovered, and any cross licensee(s)' share has been distributed, the remaining patent licensing income is shared with the inventor(s) as follows:
 - First \$100,000 - 50% to inventor(s)
 - Next \$400,000 - 25% to inventor(s)
 - Next \$2,000,000 - 15% to inventor(s)
 - >\$2,500,000 - 10% to inventor(s)

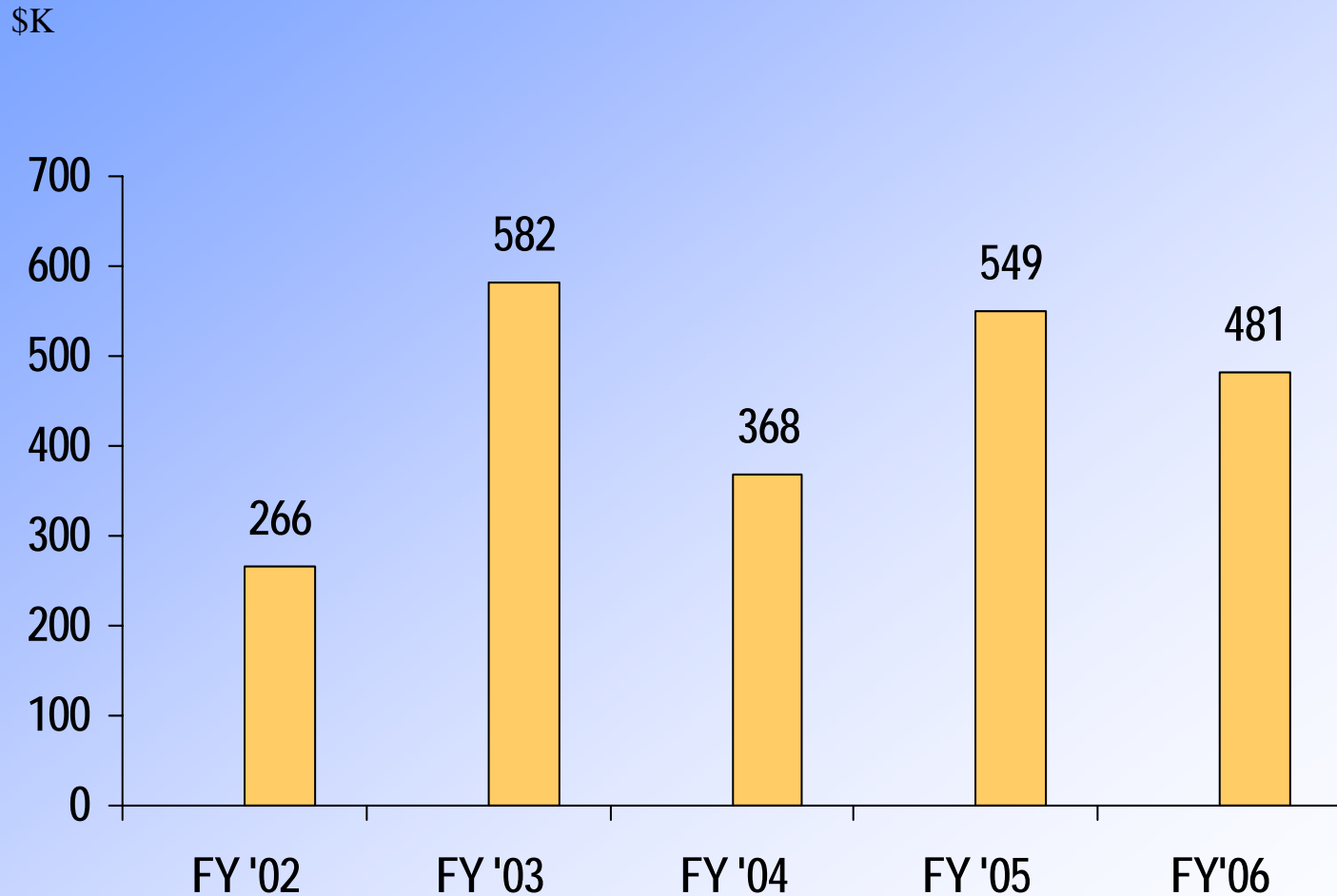
LABORATORY SHARE OF PATENT LICENSING INCOME

- After all outstanding costs for patent prosecution and licensing have been recovered, and the inventor(s)' share and cross-licensee(s)' share have been distributed, the remaining patent licensing income (Net Income) is distributed at the Laboratory as follows:
 - 40% of Net Income to be shared among BNL research departments that generated the income
 - 60% of Net Income to the Laboratory projects that foster tech transfer or new research directions
- BSA uses Net Income to fund projects in the following broad categories:
 - Cooperative R&D Projects with U.S. Industry
 - Technology Transfer Activities
 - New R&D Initiatives

PATENT LICENSING REVENUE

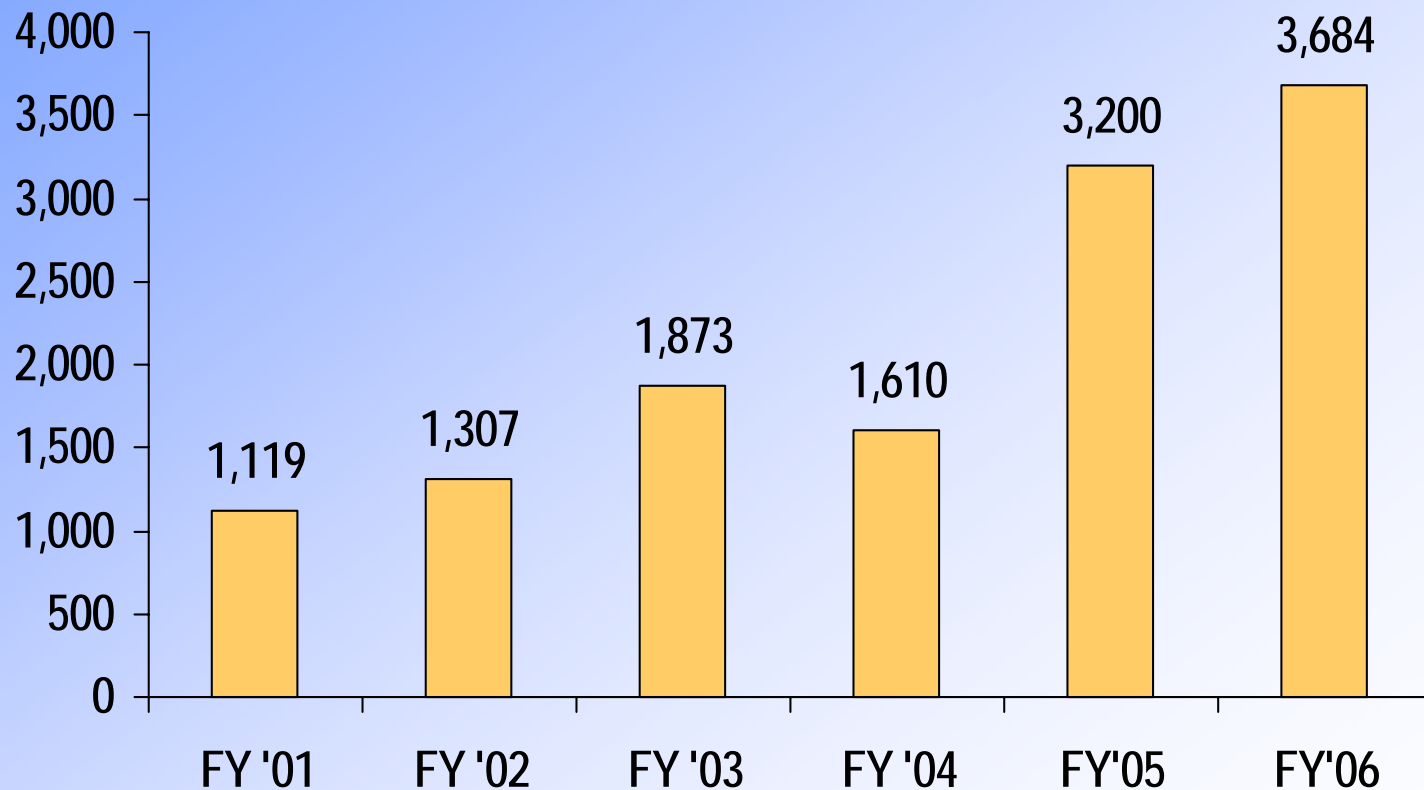


INVENTORS' SHARE OF PATENT LICENSING REVENUE



LABORATORY SHARE OF PATENT LICENSING REVENUE

\$K



RESULTS OF RE-INVESTMENTS OF LICENSING INCOME

- Physics Dept. – investment in computers for ATLAS Program put BNL in position to take lead in U.S. ATLAS Computer Program
- Medical Dept. – investment in conceptual design of cyclotron has led to possibility that DOE will fund new CIRC facility
- Life Sciences Directorate – upgrade of MR facility to improve functional MR capabilities and establish small animal PET and MR capabilities has led to new NIH funded research programs
- Instrumentation Div. – investment in CRADA with Advanced Energy Systems led to major 3 year \$750K CRADA project funded by DOE
- Environmental Sciences Dept. – Technology Maturation project for mercury remediation led to licensing of this technology to industry
- Biology Dept. – laboratory and instrument upgrades essential to attracting three important new hires (structural biology and molecular biology)