MIT researchers find cancer link

By Barry S. Newman

A gene that can transform cells into a cancer-like state differs from one chemical sub-unit, according to a report made by an MIT research team last week.

Dr. Francesco G. D'Austri, a postdoctoral fellow at the Center for Cancer Research, reported on the analysis of cells taken from a human bladder tumor to a medical symposium sponsored by the American Cancer Society at the Roswell Park Memorial Institute in Buffalo, N.Y., Thursday.

The discovery, made by a team of scientists from the Center for Cancer Research, the National Cancer Institute and Merck Laboratories, shows that the change of but one nucleotide—one of the roughly six billion "letters" in a human cell's genetic code—may cause a normal cell to become cancerous.

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MIT labs adjust to Federal budget cuts

By Leo Hoorvitz

MIT research centers and laboratories are surviving in the face of changing Federal budget priorities and continuing uncertainties about government funding levels.

Professor Peter A. Wolff, director of the Bittero National Magnet Laboratory, said, "We went through a big crunch here last year. We had a lot of pain... In one of this, we're surviving... We're managing to do the things we have to do."

The laboratory is searching for new funding sources, including a new software development grant program through the Department of Defense, Wolff noted.

The effect of Federal budgetary reductions on MIT laboratories varies widely. Although the last academic year marked the first time in many years that sponsored research at MIT's laboratories declined, in real dollars, the decision of many independent research laboratories to cut back on sponsored research may mean they were being maintained.

"Overall, I would say, yes, [budget cuts] have negative effects, but we have managed to sustain at least the core of the scientific research," said Professor Chryssostomos Chryssostomidis, director of the MIT Sea Grant College Program. "We are missing new opportunities we feel will have been beneficial to the institute."

Federal budgetary pressure on MIT research laboratories have forced some to search for alternative sources of funding.

Director of the Center for Transportation Studies, Professor Daniel Rosen '61, noted, "We have been impacted quite significantly. About three years ago the center was about 90 percent federally supported, and this coming year, for the first time in history, we're getting less than 50 percent of our support from the Federal government."

The center has been able to find private funding sources, so "the mix of the research has remained relatively stable," according to Rosen.

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Non-engineers find few jobs

By Jake Tito

This year's employment outlook represents both the best of times and the worst of times for MIT's graduating class of 1982.

"This was our best recruiting year ever," said Alumni Association Executive Vice President William H. Gilbert '61, but a number of snags, particularly those relating to architecture, geology, political sciences, and urban studies, could not find jobs by graduation.

Civil engineers specializing in water resources also had difficulties finding jobs, according to a report by Robert Weatherall, director of the Career Planning and Placement Office, on job placement for the Class of 1982.

The 1981-82 job market was "as full of contradiction as the economy as a whole," Weatherall said. Despite the recession, 450 employers−the most ever−came to the Placement Office to recruit new graduates, according to Weatherall's report.

Women generally received more offers and slightly higher starting salaries than men, according to Weatherall. Members of minority groups received comparable offers to whites.

Corporations actively recruited most engineering graduates. Mechanical engineering graduates fared extremely well despite struggling automobile and machinery industries, according to the report.

Oil companies demand for chemical engineering graduates varied widely during the year due to fluctuations in oil prices, Weatherall said. As a result, chemical engineers not applying early in the year had difficulty finding employment.

Last December, oil companies were eager to hire engineers needed to launch massive projects, according to the report. Lower oil prices and high interest rates, however, soon deflated their desires.

"The dislocation in the oil industry," Weatherall noted, "is a particularly vivid example of the sort of dislocation which has haunted many well-organized projections of the need for scientists and engineers. A student's training in a technical discipline is a perishable commodity, and students have reason to shy away from fields in which they may not be able to exploit their expertise immediately, however promising the long term demand may be.

Weatherall said he will give special attention this year to students in non-engineering courses in which graduates had problems finding jobs last year.

With increasing numbers of MIT students choosing immediate employment over graduate school, Heath and Weatherall both view the coming job market with a modicum of caution. "Students think the academic life is unattractive," offered Weatherall. "We will give special attention this year to students in non-engineering courses in which graduates had problems finding jobs last year.

"Don't know how eagerly companies will be looking for students," explained Weatherall.

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Most freshmen take new writing exam

By Tony Zamparini

Nearly all the entire freshman class appeared last Friday to take a writing test to evaluate their language skills, according to Peggy Richardson, Executive Officer of the Undergraduate Academic Support Office.

Neither Richardson nor Associate Professor Kenneth M. Manning, chairmen of the faculty committee on the Writing Requirement, could give an accurate count of freshmen who participated.

Beginning with the Class of 1987—next year's freshmen—all graduating seniors will be required to demonstrate a minimum level of writing proficiency.

The MIT faculty approved the new writing requirement last April 21. Manning's committee will implement the new requirement last Friday's writing samples will provide freshmen with an indication of weaknesses in their writing ability and will assist the committee in evaluating the writing needs of incoming students, according to Manning.

The writing requirement asked freshmen to either describe a scientific experiment or to discuss their Residence/Orientation week experiences. Freshmen had one hour to write their sample.

"We have yet to decide what to do with students who missed the writing sample last Friday", said Associate Professor Kenneth M. Manning, chairman of the faculty committee on the Writing Requirement. "A number of freshmen called us if there would be a second opportunity to take the writing sample, he added. Manning refused to comment on details of the writing requirement: "We're still working on that. I don't want to say in any precise way what will be done next year."

The Committee on Educational Policy (CEP) delayed a report released in December, 1981: "A substantial number of MIT students do not achieve a level of writing proficiency adequate for either their course work at MIT or their professional careers later on."