The Present
And a bit of “personal” history
From Yale...
To Los Alamos ...
To Caltech ...
To Michigan ...
From Teaching ...
Hydrodynamic Turbulence:

T.H. Dugowson, Phys FL I, 100 (1974)
J. M. Burgers, P. C. Martin, Phys Rev A 12, 156 (1975)

Vol I - Froyan (or other) Physios

\( \frac{\partial \mathbf{u}}{\partial t} + (\mathbf{u} \cdot \nabla) \mathbf{u} = -\nabla \mathbf{p} + \frac{1}{\rho} \nabla \cdot \mathbf{F} + \mathbf{D} \mathbf{u} = 0 \)

Cross-diffusion between fluid splashes

- Hydrodynamic or kinetic theory
- \( \varepsilon \) and \( \delta \)
- Higher - timeline structure
  - Blend dissipate condition
To research ...
To writing ...
Nuclear Reactor Analysis
INERTIAL CONFINEMENT FUSION

James J. Duderstadt
and
Gregory A. Moses
原子炉の理論と解析

成田正邦　藤田文行　共訳

現代工学社
A UNIVERSITY FOR THE 21st CENTURY

JAMES J. DUDERSTADT
Intercollegiate Athletics and the American University
A UNIVERSITY PRESIDENT'S PERSPECTIVE

JAMES J. DUDERSTADT
A Growing Season

A Report from the President
The University of Michigan
1986 - 1996
PREPARING FOR THE
REVOLUTION

Information Technology
and the Future of the
Research University

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES
To deaning ...
The Team
The Challenge

(Rather, THE CRISIS!!!)
Trauma of the 1970s

- Growth of College General Fund Budget was 1% per year compared to 7% per year for rest of University (1970-71 to 1980-81)
- College Instructional Staff declined 12% from 302 to 268.
- College Support Staff declined 9% from 152 to 138
- College Enrollment increased by 44%
- College SCH increased by 35%
- College SCH/FTE increased by 45%
The Plan
The College of Engineering:
Status and Future

--- A presentation for the Executive Officers

November 4, 1981
College of Engineering Five-Year Plan

$10 M

Five-Year Plan Target (CPI adjusted)

Five-Year Plan Budget Growth Request

Actual Budget Growth

Present Size of Engineering Gap

$6.35 M
The University of Michigan
ANYTHING GOES FUND

PAY TO College of Engineering $____________

______________ DOLLARS

B. E. FRYE AND CO.
ANN ARBOR, MICHIGAN
The Move
Jump-starting ...
Lobbying ...
Building ...
The Creation of CAEN
(The Computer Aided Engineering Network …
Dan Atkins and Dick Phillips)
From dean-ing ... 
to provost-ing ...
An unusual stir of excitement and concern greeted the appointment last April of U-M Engineering dean Jim Duderstadt as the University of Michigan’s new provost and vice president for academic affairs—the U-M’s second in command. Replacing the mild-mannered, popular Billy Frye (now dean of the graduate school and vice president for research at Emory University), the forty-three-year-old Duderstadt is the first engineer to hold the key job.
Jim Duderstadt's Picnic At North Campus Commons
The Charts
Degree Production

- B.S. (Eng)
- M.S.
- Ph.D.
1981-1986 Progress

- The North Campus move of the College was finally completed.
- The General Fund budget of the College was tripled (from $13 M/y to $36 M/y) (including the Research Excellence Fund)
- The salaries of assistant and associate professors were doubled (with corresponding increases for selected full professors).
- 120 new faculty were hired.
- The Computer Aided Engineering Network (CAEN) was created.
- PhD production was doubled.
- Sponsored research support was doubled.
Perhaps most important...

- Establishing the College of Engineering as a top priority of the University of Michigan and the State of Michigan.
- Transforming the culture of the College, by raising the bar for the achievement of excellence and building the confidence it could be achieved.
- Rebuilding the quality of the faculty of the College both through new hires and rewarding and retaining our top performers.
From deaning ... to provosting ...
From provosting ... to presiding ...
Dear Jim,

Someday even they have
to make a decision! When they
do:

1. Correct Decision: Open (A)
2. Bad Decision: Open (B)

Or else, throw up your
hands and open both now.

- Chuck

6-6-88
The guardian angel
Friday June 21, 1996 at 11:30 am

Open house and tours until 5:00 pm

Please join the Michigan community for the dedication of the University of Michigan Media Union

Open to all those who dare to invent the future
The Future of the North Campus
The Evolution of the Master Plan
North Campus Redux ???
EXISTING
1  Bursley Residence Hall
2  H.H. Dow
3  G.G. Brown
4  Electrical Engineering and Computer Science
5  Lurie Engineering Center
6  Industrial and Operations Engineering
7  Cooley Laboratory
8  Phoenix Laboratory
9  Media Union
10  Chrysler Center
11  Pierpont Commons
12  Moore Music School
13  Art and Architecture
14  Institute of Science and Technology
15  Center for Display Technology and Manufacturing
16  Bentley Library
17  Ford Library
18  Advanced Technology Laboratories
19  School of Information North
20  Computing Center

PROPOSED
1  Academic Building (TBD)
2  School of Information
3  Computer Science Building
4  Union/"Rackham North"
5  Residence Hall Over Retail
6  All Faiths Meditation Space
7  Walgreen Center/Arthur Miller Theater with Retail Edge
8  Pierpont Commons Extension Over Retail
9  Music School Extension
10  Art and Architecture Tower
11  Hotel/Housing
12  Convention Center
13  Housing or Research
14  Academic Building (TBD)
15  "Fleming Building"
16  "Wolverine Tower"
17  Site for Dance Center
18  Sites for Market Housing
19  Parking Structure

View to the northeast.
Walking southeast on the "Diag."
View north toward the School of Music pond.
EXISTING
1. Bursley Residence Hall
2. H.H. Dow
3. G.G. Brown
4. Electrical Engineering and Computer Science
5. Lurie Engineering Center
6. Industrial and Operations Engineering
7. Cooley Laboratory
8. Phoenix Laboratory
9. Media Union
10. Chrysler Center
11. Pierpont Commons
12. Moore Music School
13. Art and Architecture
14. Institute of Science and Technology
15. Center for Display Technology and Manufacturing
16. Bentley Library
17. Ford Library
18. Advanced Technology Laboratories
19. School of Information North
20. Computing Center

PROPOSED
1. Residential Hall or Residential College
2. Computer Science Building
3. All Faiths Meditation Space
4. Union/"Rackham North"
5. "Fleming Building"
6. Walgreen Center/Arthur Miller Theater
7. School of Information
8. Music School Extension
9. Art and Architecture Tower
10. Art and Architecture Extension
11. "Wolverine Tower"
12. Convention Center
13. Hotel, Housing, or Research
14. Sites for Market Housing
15. Parking Structure

View to the east.

Looking over Pierpont Commons to "Diag."

Looking toward "Diag" between new residential hall on the left and new "superunion" on the right.
The North Woods Master Plan
View down Hayward Through "Woodland"
North Campus Entrance off Fuller