

2010/11 Survey on Research Facilities & Infrastructure at Stony Brook University

University Senate Research Committee

Report 8/2011

2010/11 Committee:

Lisa Benz Scott

Hugo Benitez-Silva

Christopher Cutler

Galyna Cymachevska

Aimee DeChambeau (until 05/11)

Paul Firbas

Joseph Lauher

Michael Hadjiargyrou

Marci Lobel

Thomas Robertazzi (Co-Chair)

Arthur Samuel (until 12/10)

Dominik Schneble (Co-Chair)

Gina Sorrentino

Wei Zhu

Health Care Policy and Management

Economics

Periodontics

Undergraduate Student

Library

Hispanic Languages

Chemistry

Biomedical Engineering

Psychology

Electrical Engineering

Psychology

Physics

Graduate Student

Applied Mathematics and Statistics

Introduction

In the second half of November 2010, the Research Committee of the University Senate conducted an online survey of 2700 faculty at Stony Brook on research infrastructure and facilities at the campus. There were 385 responses during the 10-day window of the survey.

The Committee wishes to thank all of the faculty who responded. The survey would not have been possible without the technical assistance of Ying Xiong from Teaching, Learning and Technology (TLT). Nancy Daneau, Deputy to the Vice President for Research, provided needed support for the Committee's work in all phases of the survey.

The Committee mourns the passing of Dr. John H. Marburger III, Vice President for Research, who suggested the idea of the present survey as a follow-up to the 2009/10 survey on faculty research, and who has supported the Committee's work with his genuine interest, advice, and encouragement.

It is hoped this survey will quantify to some extent faculty perceptions of the research infrastructure and facilities at Stony Brook. It is also hoped that this survey and its recommendations will be useful in providing guidance for strategic planning of improvements and maintenance of Stony Brook's research infrastructure and facilities.

Recommendations

- A) The following problem areas were frequently mentioned by survey respondents and should be addressed to the extent possible:

Physical Plant

- 1) Poor physical condition of buildings.
- 2) Electric power (reliability and quality).
- 3) Climate control for laboratories, offices and library.
- 4) Lack of laboratory space.
- 5) Renovations and repairs to laboratories, offices and library facilities are prohibitively expensive and take too long.

Equipment and Infrastructure

- 1) Need for more shared equipment and core facilities.
- 2) Equipment upgrades (repairs, maintenance and insurance).
- 3) Computers (supplies and upgrades: particularly for Humanities, Social Sciences and Fine Arts).

Support Services

- 1) Insufficient janitorial services.
- 2) Insufficient security (Laboratories, offices and library).

- B) Deficiencies in buildings described in this report's tabular data should be addressed to the extent possible.

Additional Specific Recommendations

- C) Increase use of direct costs (IFR) or indirect costs by colleges and departments to support research infrastructure needs.
- D) Encourage strategic planning between the Office of the Vice President of Research and the Office of Facilities and Services on issues of research infrastructure.
- E) Facilitate opportunities and create/find space for interdisciplinary collaborations.
- F) Have Property Control maintain a highly accessible, web-based list of surplus equipment across the university.

Tabular data

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- page 8** Does your research space have sufficient HVAC?
- page 9** Does your research space have sufficient electric capability?
- page 10** Does your research space have sufficient gas supply?
- page 11** Does your research space have sufficient waste management/janitorial services?
- page 12** How important for your research is it to have back up power?
- page 13** How secure is your laboratory and office from theft?
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Can you cite cases where physical plant failures have affected research?

Building	total # of answers	# Yes
HSC/Hospital	78	32%
Math/Physics Bldg.	26	38%
Social and Behavioral Sciences (SBS)	19	16%
Humanities Bldg.	10	0%
Life Sciences Bldg.	22	73%
Light Engineering Bldg	7	0%
Staller Center for the Arts	7	43%
Harriman Hall	9	11%
Computer Science Bldg	8	50%
SOMAS Bldg.	10	100%
Chemistry Bldg.	9	56%
Psychology Bldgs.	10	40%
Earth and Space Sciences Bldg. (ESS)	11	45%
Library, Frank Melville Jr. Memorial	17	6%
Engineering Bldg.	1	0%

How much laboratory space do you have excluding office space?

Building	total # of ans.	<100 sq ft	100- 200 sq ft	201- 500 sq ft	501- 1000 sq ft	>1000 sq ft
HSC/Hospital	72	43%	11%	11%	21%	14%
Math/Physics Bldg.	26	58%	8%	8%	12%	15%
Social and Behavioral Sciences (SBS)	14	50%	21%	14%	7%	7%
Humanities Bldg.	5	40%	20%	0%	0%	40%
Life Sciences Bldg.	22	9%	9%	18%	41%	23%
Light Engineering Bldg	7	29%	0%	57%	0%	14%
Staller Center for the Arts	5	60%	0%	20%	20%	0%
Harriman Hall	8	88%	13%	0%	0%	0%
Computer Science Bldg	8	0%	13%	63%	13%	13%
SOMAS Bldg.	10	0%	0%	50%	50%	0%
Chemistry Bldg.	11	9%	0%	9%	36%	45%
Psychology Bldgs.	10	0%	0%	10%	80%	10%
Earth and Space Sciences Bldg. (ESS)	11	36%	18%	9%	27%	9%
Library, Frank Melville Jr. Memorial	9	78%	11%	0%	0%	11%
Engineering Bldg.	1	0%	0%	0%	100%	0%

Are you satisfied with your current laboratory/research space?

Building	total # of ans.	# No
HSC/Hospital	77	26%
Math/Physics Bldg.	26	23%
Social and Behavioral Sciences (SBS)	18	17%
Humanities Bldg.	9	0%
Life Sciences Bldg.	23	26%
Light Engineering Bldg	7	0%
Staller Center for the Arts	7	43%
Harriman Hall	10	20%
Computer Science Bldg	8	50%
SOMAS Bldg.	10	50%
Chemistry Bldg.	11	18%
Psychology Bldgs.	10	0%
Earth and Space Sciences Bldg. (ESS)	10	30%
Library, Frank Melville Jr. Memorial	15	13%
Engineering Bldg.	1	100%

Does your research space have sufficient HVAC?

Building	total # of ans.	# No
HSC/Hospital	71	17%
Math/Physics Bldg.	25	12%
Social and Behavioral Sciences (SBS)	15	13%
Humanities Bldg.	8	0%
Life Sciences Bldg.	22	27%
Light Engineering Bldg	7	14%
Staller Center for the Arts	5	60%
Harriman Hall	9	11%
Computer Science Bldg	8	63%
SOMAS Bldgs.	10	70%
Chemistry Bldg.	11	18%
Psychology Bldgs.	9	44%
Earth and Space Sciences Bldg. (ESS)	10	20%
Library, Frank Melville Jr. Memorial	15	13%
Engineering Bldg.	1	100%

Does your research space have sufficient electric capability?

Building	total # of ans.	# No
HSC/Hospital	73	15%
Math/Physics Bldg.	24	0%
Social and Behavioral Sciences (SBS)	14	0%
Humanities Bldg.	8	0%
Life Sciences Bldg.	23	17%
Light Engineering Bldg	7	0%
Staller Center for the Arts	5	20%
Harriman Hall	9	0%
Computer Science Bldg	8	38%
SOMAS Bldgs.	10	40%
Chemistry Bldg.	11	0%
Psychology Bldgs.	9	22%
Earth and Space Sciences Bldg. (ESS)	10	30%
Library, Frank Melville Jr. Memorial	15	0%
Engineering Bldg.	1	100%

Does your research space have sufficient gas supply?

Building	total # of ans.	# No
HSC/Hospital	73	5%
Math/Physics Bldg.	24	0%
Social and Behavioral Sciences (SBS)	14	0%
Humanities Bldg.	8	0%
Life Sciences Bldg.	22	9%
Light Engineering Bldg	7	0%
Staller Center for the Arts	5	0%
Harriman Hall	9	0%
Computer Science Bldg	8	0%
SOMAS Bldgs.	10	40%
Chemistry Bldg.	11	18%
Psychology Bldgs.	9	0%
Earth and Space Sciences Bldg. (ESS)	10	20%
Library, Frank Melville Jr. Memorial	15	0%
Engineering Bldg.	1	0%

Does your research space have sufficient waste management and janitorial services?

Building	total # of ans.	# No
HSC/Hospital	73	12%
Math/Physics Bldg.	24	38%
Social and Behavioral Sciences (SBS)	15	40%
Humanities Bldg.	8	13%
Life Sciences Bldg.	23	26%
Light Engineering Bldg	7	43%
Staller Center for the Arts	5	0%
Harriman Hall	10	30%
Computer Science Bldg	8	38%
SOMAS Bldgs.	10	50%
Chemistry Bldg.	11	73%
Psychology Bldgs.	9	56%
Earth and Space Sciences Bldg. (ESS)	10	30%
Library, Frank Melville Jr. Memorial	15	20%
Engineering Bldg.	1	100%

How important for your research is it to have back up power?

Building	total # of ans.	critical	important	not important or N/A
HSC/Hospital	76	37%	26%	37%
Math/Physics Bldg.	26	8%	54%	38%
Social and Behavioral Sciences (SBS)	15	0%	27%	73%
Humanities Bldg.	8	0%	13%	88%
Life Sciences Bldg.	23	65%	30%	4%
Light Engineering Bldg	7	14%	43%	43%
Staller Center for the Arts	6	17%	33%	50%
Harriman Hall	10	10%	20%	70%
Computer Science Bldg	8	38%	25%	38%
SOMAS Bldgs.	10	70%	20%	10%
Chemistry Bldg.	11	27%	55%	18%
Psychology Bldgs.	10	20%	10%	70%
Earth and Space Sciences Bldg. (ESS)	10	30%	50%	20%
Library, Frank Melville Jr. Memorial	17	6%	12%	82%
Engineering Bldg.	1	100%	0%	0%

How secure is your laboratory and office from theft?

Building	total # of answers (applicable)	insecure
HSC/Hospital	62	39%
Math/Physics Bldg.	24	42%
Social and Behavioral Sciences (SBS)	9	11%
Humanities Bldg.	2	0%
Life Sciences Bldg.	22	18%
Light Engineering Bldg	7	14%
Staller Center for the Arts	5	20%
Harriman Hall	8	25%
Computer Science Bldg	7	43%
SOMAS Bldgs.	10	50%
Chemistry Bldg.	11	27%
Psychology Bldgs.	10	10%
Earth and Space Sciences Bldg. (ESS)	9	0%
Library, Frank Melville Jr. Memorial	10	50%
Engineering Bldg.	1	0%

How would you rate the quality of (lab) construction/renovations?

Building	total # of ans. (w/ experience only)	Rating			
		Excellent	Fair	Good	Poor
HSC/Hospital	48	8%	54%	29%	8%
Math/Physics Bldg.	15	20%	20%	20%	40%
Social and Behavioral Sciences (SBS)	4	0%	100%	0%	0%
Humanities Bldg.	1	0%	100%	0%	0%
Life Sciences Bldg.	21	24%	43%	29%	5%
Light Engineering Bldg	3	0%	67%	33%	0%
Staller Center for the Arts	4	0%	25%	0%	75%
Harriman Hall	4	0%	0%	50%	50%
Computer Science Bldg	8	25%	25%	0%	50%
SOMAS Bldgs.	7	0%	43%	43%	14%
Chemistry Bldg.	8	13%	25%	63%	0%
Psychology Bldgs.	5	0%	60%	20%	20%
Earth and Space Sciences Bldg. (ESS)	9	0%	44%	33%	22%
Library, Frank Melville Jr. Memorial	4	0%	75%	0%	25%
Engineering Bldg.	1	0%	100%	0%	0%

Are data links on campus and to off-campus sites adequate in data transmission rate?

Building	total # of ans. (Y/N)	#No
HSC/Hospital	47	17 %
Math/Physics Bldg.	18	17 %
Social and Behavioral Sciences (SBS)	11	36 %
Humanities Bldg.	2	0 %
Life Sciences Bldg.	15	33 %
Light Engineering Bldg	4	25 %
Staller Center for the Arts	2	50 %
Harriman Hall	6	17 %
Computer Science Bldg	6	50 %
SOMAS Bldgs.	7	14 %
Chemistry Bldg.	7	29 %
Psychology Bldgs.	8	13 %
Earth and Space Sciences Bldg. (ESS)	9	33 %
Library, Frank Melville Jr. Memorial	10	40 %
Engineering Bldg.	1	100 %

Do you have easy access to teleconferencing and smart conference facilities?

Building	total # of ans. (applic able)	No
HSC/Hospital	40	55%
Math/Physics Bldg.	15	53%
Social and Behavioral Sciences (SBS)	10	100%
Humanities Bldg.	4	25%
Life Sciences Bldg.	15	80%
Light Engineering Bldg	2	100%
Staller Center for the Arts	4	25%
Harriman Hall	4	50%
Computer Science Bldg	7	86%
SOMAS Bldgs.	8	38%
Chemistry Bldg.	3	67%
Psychology Bldgs.	8	50%
Earth and Space Sciences Bldg. (ESS)	9	33%
Library, Frank Melville Jr. Memorial	11	73%
Engineering Bldg.	1	0%

Appendices

page 18 Occupancy of Buildings

page 19 Printout of online-survey questions

Building Occupancies (tenure-track/tenured faculty)*

Building	#
HSC/Hospital	266
Math/Physics	103
SBS	99
Humanities	60
Life Sciences	52
Light Engineering	44
Staller Center	39
Harriman	37
Computer Science	35
SOMAS buildings	31
Chemistry	30
Psychology A&B	30
ESS	24
Melville	19
Old Engineering	14

* data based on OVPR spreadsheet "faculty headcount per dept.xlsx" and university webpages (to identify location of departments)



University Senate Research Facilities/Infrastructure Survey

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Research Facilities/Infrastructure Survey

Dear Colleague,

As you may recall, some months ago the University Senate's Research Committee gathered your input on important matters concerning Research at our University. Your responses were carefully analyzed and condensed into recommendations, to which Vice President for Research Dr. John H. Marburger, III has provided an official response (see <http://www.stonybrook.edu/research/>). Moreover, the University Senate has approved a resolution that resulted from the survey.

Based on your input and discussions with the OVPR, we are now conducting a follow-up survey specifically about the state of the University's research facilities and infrastructure. The survey aims to evaluate the current state of infrastructure and conditions under which research is performed at the University, and to identify pressing needs.

The survey is anonymous and should not take more than 10 to 15 minutes of your time. It will be open for the next 10 days.

Please take the time to respond. Your voice is important.

Sincerely,

University Senate Research Committee



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Affiliation

1. What is your affiliation?*
- Please Select --



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CAS

2. What's your primary department?*

-- Please Select --



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CEAS

3. What's your primary department?*

-- Please Select --



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School of Medicine

4. What's your primary department?*

-- Please Select --



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Stony Brook Buildings

If needed, please consult the [campus map](#).

5. Which building is your research primarily conducted in?*

-- Please Select --



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Southampton Buildings

If needed, please consult the [campus map](#).

6. Which building is your research primarily conducted in? *
- Please Select --



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More About Yourself

7. What type of research do you conduct (check all that apply)?

- Basic
- Applied
- Clinical
- Translational
- Other, please specify

8. What is your highest degree?

- Masters or equivalent
- Ph.D. or equivalent
- M.D. or equivalent
- Other, please specify



University Senate Research Facilities/Infrastructure Survey

Note: In answering the following questions please consider only your experiences over the past five years.



Personnel and Services

9. Is there an administrative structure in your department (i.e. research director/administrator) to assist in research activities?

- Yes
- No
- Don't know.

10. How do you rate responsiveness to breakdowns/maintenance of your research equipment?

- Excellent
- Good
- Fair
- Poor
- Not applicable

11. How responsive is the Dept. of Information Technology (DoIT) for your computing needs?

- Excellent
- Good
- Fair
- Poor
- Not applicable

12. Are the services of the shops and commissaries on campus sufficient to meet your needs for fabrication and repair of research equipment?

- Yes
- No
- Not applicable

13. Are the facilities to support research involving human subjects sufficient for your research needs?

- Yes
- No
- Not applicable

14. Are the facilities to support research involving animals sufficient for your research needs?

- Yes
- No
- Not applicable

15. If applicable, please rate any of the following core facilities that you use.

	By Services Provided	By Cost	Willing to pay more for the use of the facility in order to keep it operating?
Bioinformatics Facility	Please select	Please select	Please select
Biostatistical Consulting Core	Please select	Please select	Please select

Excellent/Good/Fair/Poor (points to 'By Services Provided' column)

Expensive/Fair/Inexpensive (points to 'By Cost' column)

Yes/No (points to 'Willing to pay...' column)

Cell Culture/Hybridoma Facility, Microbiology	Please select	Please select	Please select
Central Microscopy Imaging Center	Please select	Please select	Please select
Division of Laboratory Animal Resources	Please select	Please select	Please select
DNA Microarray Facility	Please select	Please select	Please select
DNA Sequencing Facility	Please select	Please select	Please select
Flow Cytometry Laboratory	Please select	Please select	Please select
Genomics Core Facility	Please select	Please select	Please select
Imaging Center	Please select	Please select	Please select
Materials Characterization Laboratory	Please select	Please select	Please select
Micro Computed Tomography Facility	Please select	Please select	Please select
Office of Clinical Trials	Please select	Please select	Please select
Proteomics Center	Please select	Please select	Please select
Rapid Prototyping	Please select	Please select	Please select
University Nuclear Magnetic Resonance Center	Please select	Please select	Please select

16. If you use any other centralized facilities that are not listed above, please add and rate them here.

	Please specify	By Services Provided	By Cost	Willing to pay more for the use of the facility in order to keep it operating?
Facility1		-- Please Select --	-- Please Select --	-- Please Select --
Facility2		-- Please Select --	-- Please Select --	-- Please Select --
Facility3		-- Please Select --	-- Please Select --	-- Please Select --
Facility4		-- Please Select --	-- Please Select --	-- Please Select --
Facility5		-- Please Select --	-- Please Select --	-- Please Select --
Facility6		-- Please Select --	-- Please Select --	-- Please Select --
Facility7		-- Please Select --	-- Please Select --	-- Please Select --
Facility8		-- Please Select --	-- Please Select --	-- Please Select --
Facility9		-- Please Select --	-- Please Select --	-- Please Select --
Facility10		-- Please Select --	-- Please Select --	-- Please Select --

17. Are you aware that there is insurance coverage for research equipment?

- Yes
- No
- Not applicable

18. Feel free to provide any additional information regarding the questions above.



University Senate Research Facilities/Infrastructure Survey

Physical Plant

19. Can you cite cases where physical plant failures have affected research?

- Yes (please explain below)
- No
- Not applicable

20. How much laboratory space do you have excluding office space?

- Less than 100 sq feet
- 100-200 sq feet
- 201-500 sq feet
- 501-1000 sq feet
- more than 1000 sq feet

21. Are you satisfied with your current laboratory/research space?

- Yes
- No (please explain below)
- Not applicable

22. Does your research space have sufficient

	Yes	No	Not applicable
HVAC	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Electric capability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gas supply	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Waste management and janitorial services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Is there sufficient space in the incubator for commercialization purposes?

- Yes
- No
- Not applicable

24. How important for your research is it to have back up power?

- Critical
- Important
- Not important
- Not applicable

25. How secure is your laboratory and office from theft?

- Secure
- Not secure (please explain below)
- Not applicable

26. How would you rate the quality of (lab) construction/renovations?

- Excellent
- Good
- Fair
- Poor (please explain below)
- No experience

27. Are bids for lab renovation competitive (do they represent a hardship in terms of time and expense)?

- Competitive
- Not competitive (please explain below)
- No experience

28. Feel free to explain your responses to the previous Physical Plant questions above.

Physical plant failures _____

Lab space satisfaction _____

HVAC _____

Electric capability _____

Gas supply _____

Waste management & janitorial services _____

Incubator space _____

Back up power _____

Lab/office security _____

Construction/Renovation quality _____

Bids for lab renovation _____



Equipment and Maintenance

29. What type of specialized instrumentation do you use predominantly to conduct your research?

30. What type of specialized instrumentation to conduct your research do you need that you don't currently have (be specific)?

Adequate/Not
adequate/ Not
applicable

Adequate/Not
adequate/ Not
applicable

31. Please rate the adequacy of instrumentation needed to conduct your research:

Quality

Quantity

Major Instrumentation

Please select

Please select

Minor Instrumentation

Please select

Please select

32. How would you rate the maintenance of research related equipment?

- Excellent
- Good
- Fair
- Poor (please explain below)
- Not applicable

33. Do you have sufficient computing power (hardware/software) for your research?

- Yes
- No (please explain below)
- Not applicable

34. How often are you provided with a new computer (for research purposes)?

- Every 1-2 years
- Every 3-4 years
- Every 5 years or more
- Not applicable (purchase from research grant)

35. Does your department or school/college have spare computing equipment which can be loaned?

- Yes
- No
- Don't know.

36. How adequate is the supply of software available to conduct your research?

- Excellent
- Good

- Poor (please explain below)
- Not applicable

37. Are data links on campus and to off-campus sites adequate in data transmission rate?

- Yes
- No
- Not applicable or don't know

38. Do you have access to high capacity scanners and laser printers?

- Yes
- No
- Not applicable

39. Should there be more shared equipment?

- Yes (please explain below)
- No
- Not applicable

40. Do you have easy access to teleconferencing and smart conference facilities?

- Yes
- No
- Don't use
- Don't know

41. Feel free to explain your responses to the previous Equipment and maintenance questions.

Instrumentation

Equipment maintenance

Computer supplies

Computer upgrades

Spare computing equipment

Software supplies

Data links

Scanners and printers

Shared equipment

Teleconferencing and smart conference facilities



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Comments and Suggestions

42. Is there any other issue relating to research facilities and infrastructure that you would like to comment on? Please explain.