

Partnerships for STEM Infrastructure Enhancement

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- ❑ 4 year Public Institution
 - ❑ 60% Minority, 35% Latino
 - Cubans, Dominicans, Puerto Ricans, Peruvians, Mexicans, Central American and Others
 - ❑ Multi-ethnic population (African-American, Africans, East Asian, Filipinos, Eastern Europeans, Middle Eastern)
 - ❑ Serves a predominantly 1st generation college population
 - ❑ Feeder university for Hudson County Community College (HCCC), also an HSI (44% Hispanic)
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Partnerships with HCCC

- Funded through CCRAA* Grant
- Course Alignment and Articulation Development
- Updating physical laboratory space
 - Biology
 - Chemistry
 - Physics
 - Mathematics
 - Geosciences

*College Cost Reduction Access Act

Improving Laboratories

- ❑ Renovate and expand Microbiology Lab at NJCU (shared between NJCU & HCCC)
 - ❑ 987 sq. ft; 2 NJCU and 3 HCCC sections/ semester
 - ❑ Add an additional 670 sq. ft space for more Microbiology & Cell Biology
 - ❑ Purchase equipment & instrumentation for microbiology lab
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Improving Laboratories

- ❑ Establish new Geochemistry Facility
 - ❑ Reconfigure existing lab space
 - ❑ Capital purchase of ICP-MS, XRD
 - ❑ Laboratory will be used by Chemistry Department, HCCC and local high schools
 - ❑ Currently, Union City H.S. sends summer research students as part of the ACS Seed program to NJCU
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Faculty & Student Development

- Faculty workshops
 - Integrating technology
 - Problem based learning
 - Web-based individualized learning support modules
 - Provide faculty-led academic and science skills building workshops to community college transfer students
 - Provide peer-led recitations, open labs and supplemental instruction to community college transfer students
 - Engage community college students in mentored summer research
 - Support travel for faculty and student for presentations at scientific meetings
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USDA Grant-Urban Environmental Science

- ❑ Partnership with Natural Resource Conservation Service, NJ Dept. Env. Protection, Conserve Wildlife Federation, American Museum Natural History, Liberty Science Center
 - ❑ Design new Curriculum with an urban environmental focus but integrate job requirements for internships with the NRCS and other government and non-profit groups
 - ❑ Provide 24 paid internship to students
 - ❑ Interdisciplinary course offerings between Biology, Chemistry & Geoscience
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Other Partnerships

□ Geoscience

- Successful placement of Geographical Information System Interns (75) with Companies and non-profit groups since 1998
 - Mapping JC infrastructure, brownfields, Neighborhood surveys, cancer studies, contaminated soils, etc.
 - Funding from: US ACOE, Honeywell International, HUD, NIH, Wachovia Bank, UMDNJ, NJIT, USDA
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NSF-Robert Noyce Teacher Scholarship Program

- ❑ Northern New Jersey Mathematics and Science Teacher (MAST) Fellowship Program- 5 year
 - ❑ Masters Program aims to recruit and train 20 math & science teachers
 - ❑ Partnerships with University Academy Charter High School, Jersey City Public Schools, Union City School District, the Latino Institute and the Urban League of Hudson County
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