

DERRICK T. BRAZILL

Interim Provost/Senior Vice President Academic Affairs
York College, City University of New York

Education

1995 – 1999	Postdoctoral Associate	Biochemistry and Cell Biology	Rice University
1989 – 1995	Ph.D.	Molecular and Cell Biology	UC Berkeley
1985 – 1989	B.S.	Biology	Stanford University

Administrative Experience

York College, City University of New York

Interim Provost and Senior Vice-president of Academic Affairs

2020 – present

York College is a public, urban, senior college in the City College of New York (CUNY) system. Founded in 1966 with the mission of providing a first-rate baccalaureate degree in the liberal arts to the students living in the South Jamaica section of Queens, York College has expanded its offerings to include over 60 undergraduate degree programs and 5 master's degree programs for its 7,000 students. As Interim Provost and Senior Vice-president of Academic Affairs, I advance the college's strategic priorities through leading and guiding the faculty and staff in the Division of Academic Affairs, which includes: the schools of Arts & Sciences, Business & Information Systems, and Health Sciences & Professional Programs, the Library, the Registrar, the Office of Research and Sponsored Programs, the Academic Advisement and Scholarship Center, the Undergraduate Research Programs, the Accelerate, Complete, and Engage (ACE) program, the Honors Program, the Center for Teaching, Learning, and Educational Technologies (CTLET), the Collaborative Learning Center, and College Now.

Selected Administrative Accomplishments

Student Success

- **Formation of Student Cohort Programs.** Successfully established the Accelerate Complete Engage (ACE) program, procured \$64,000 in York Foundation funds for the Teacher Education and Clinical Lab Sciences Cohorts and \$500,000 in federal funds for York STEM Academy.
- **Expansion of Academic Supports.** Augmented USIP co-curricular Booster Workshops in Chemistry, Math and Biology as well as supported the development and creation of a co-curricular remote Writing Salon.

- **Restructuring Student Supports.** Restructured the Advisement Center to a caseload model to better serve students. Updated the technology in the Scholarship Center to better identify eligible students and disburse funds. Collaborated with Student Affairs and Enrollment Management to create a peer mentoring program through the Mentor Collective, a process for reengaging stop-out students through CUNY Reconnect and the One York Welcome Center, a one-stop shop for student services.
- **Development of Internship Opportunities.** Partnered with CUNY in public-private initiatives to connect students to in-demand careers by creating a micro-credential in Marketing and embedding Advising and Industry Specialists in the Business and Economics department.

Academic Excellence

- **Expansion of Total Full Time Faculty Lines.** Brought to York a net increase of 26 full time faculty lines (14 Lecturer and 12 Tenure Track).
- **Establishment of Pathways to Master's Degrees.** Worked with CUNY to develop 4+1 programs leading to an MS or MPH. Partnered with SUNY Downstate Health Sciences University to create a pipeline into their Medical Informatics MS program.
- **Initiation of Online Masters Programs.** Successfully applied to have the Clinical Trials Management program in the first round the CUNY Online Initiative. Program scheduled to go live in Fall 2023

Faculty and Staff Support

- **Advancement of Faculty Research.** Successfully applied for \$2 million in federal funding to provide equipment and resources in support of a Holistic Study on Health Disparities.
- **Promotion of Faculty Scholarship.** Initiated the restructuring of the Office of Research and Sponsored Programs to increase staffing and to provide more support in identifying funding sources and submitting grant proposals. Instituted a Spring Symposium featuring junior faculty, highlighting their research and providing a platform for identifying potential collaborations. Created a boot camp for faculty submitting PSC-CUNY grant proposals to increase the number of funded submissions.
- **Elevation of Faculty Pedagogy.** Collaborated with the Thurgood Marshall College Fund and the Association of College and University Educators (ACUE) to secure funding to allow 60 faculty to enroll in the ACUE Effective Teaching Practices course.
- **Support of Faculty and Staff Development.** Partnered with Linked-In Learning to offer a suite of professional and skills development courses to our faculty and staff.

Vibrant Campus and Community Spirit

- **Provision of Workforce Development Offerings to Queens Community Residents.** Successfully applied for \$862,000 in federal and CUNY funding and partnered with Resorts World to offer

students and community members 13 courses in the areas of health, business, hospitality and computers, free of charge

- **Expansion of Partnerships with Queens-based Organizations.** Augmented York Early College Academy and College Now participation. Applied for and received \$3 million from the JFK Redevelopment program to create and operate an Aviation STEM program for primary and secondary school students. Reestablished the Queens Transfer Affinity Group to improve the transition of students from community colleges to York.

Hunter College, City University of New York
Department Chair, Biological Sciences

2014 - 2020

Hunter College, located on the Upper East Side of Manhattan, is part of the City University of New York (CUNY), the nation's largest urban university. Originally named "The Normal College", it was founded in 1870 by Thomas Hunter in order to educate women who desired to be teachers. Today, Hunter is coed, with faculty in the liberal arts, sciences and professional programs. It confers both undergraduate and graduate degrees, and has an enrollment of over 23,000 students (17,000 undergraduates and 6,000 graduates). As Chair of the Department of Biological Sciences, I provided leadership for the largest physical and natural sciences department at the college (27 full-time faculty, 7 degree programs/concentrations, 900 majors, 20 MA students, 45 PhD students), coordinated the scheduling for 280 course sections each semester and managed a staff of 15.

Selected Administrative Accomplishments

Student Success

- Finalized and implemented restructuring of the Biological Sciences major and the development of a degree map for the major.
- Oversaw establishment of a \$500,000 endowment for department scholarships.
- Instituted new, more efficient registration permission system.
- Instituted new advising regime.

Academic Excellence

- Hired 4 new faculty, all women, 2 from historically underrepresented groups.
- Expanded course offerings for non-majors.

Faculty and Staff Support

- Shepherded 5 faculty members through the tenure and promotion processes.

Vibrant Campus and Community Spirit

- Successfully applied for renewal of the Howard Hughes Medical Institute Undergraduate Science Education Program which offered a summer biology education workshop for New York City public middle school and high school teachers, and research laboratory outreach initiatives for high school students.

Academic Appointments

Tenured Professor of Biological Sciences, Hunter College, CUNY	2015
Tenured Associate Professor of Biological Sciences, Hunter College, CUNY	2007
Assistant Professor of Biological Sciences, Hunter College, CUNY	1999
Doctoral Faculty, Ph.D. Program in Biology, The Graduate Center, CUNY	1999
Doctoral Faculty, Ph.D. Program in Biochemistry, The Graduate Center, CUNY	1999

Selected College/University Service

- President’s Committee on the Bell Schedule, Chair, Hunter College
- Thomas Hunter Honors Program Council on Honors, Hunter College
- Senate Nominating Committee, Hunter College
- Senate General Education Requirements Committee, Hunter College
- Common Core Course Review Committee, City University of New York
- Director of Maximizing Access to Research Careers Program (MARC), Hunter College
- Senate Undergraduate Course of Study Committee, Hunter College
- Mellon Committee on General Education, Hunter College
- Personnel and Budget Committee, Department of Biological Sciences, Hunter College
- Curriculum Committee Chair, Biological Sciences, Hunter College
- Steering Committee for HHMI Undergraduate Science Education, Hunter College

Leadership Development

- 2022 AASCU Academy for New Provosts
- 2019 Diversifying CUNY’s Leadership
- 2018 Harvard Institute for Educational Management

Professional and Community Service

Organization	Position	Date
NSF National Research Hub for STEM Education at Hispanic Serving Institutions	Advisory Committee	2018-present
Training, Workforce Dev. And Diversity (TWD) Study Section, NIH-NIGMS	Member	2013-2019
NSF Molecular and Cellular Biosciences Proposal Review Panel, NSF	Member	2004-2009; 2013-2016
NSF MIND Alliance	Steering Committee	2008-2014
NSF Conversation in Biology Education. <i>Vision and Change in Biology Undergraduate Education</i>	Panelist	2007
Museum of Natural History, Houston, TX	Docent	1996-1999

Museum of Health and Medical Science,
Houston, TX

Docent/Program Developer

1996-1999

Honors and Awards

2022	CSU Monterrey Bay Diversity Celebration Series Speaker
2016	Co-Chair, International <i>Dictyostelium</i> Conference
2013	Inaugural Dr. Milton J. Hernandez Lecture in Mentoring Excellence, NIH-NIAID
2013	Hunter Presidential Award: Witten Award for Full-Time Teaching
2011	Outstanding Undergraduate Mentoring in the Sciences at Hunter College
2006	Inaugural Stanford University Distinguished Alumni Scholar
2005	Presidential Early Career Award for Scientists and Engineers
1993	Outstanding Graduate Student Instructor, University of California, Berkeley
1989	Ford Foundation Predoctoral Fellow

Research and Scholarship

Grant Experience

	Position	Date
Department of Education (MSEIP) York STEM Academy \$166,000 per annum	PI	2021-present
National Institutes of Health (NIGMS) Interdisciplinary Biomedical Research Training at Hunter \$350,000 per annum	PI	2011-2021
National Science Foundation Regulation of the Cytoskeleton by Signaling Proteins during Quorum Sensing \$105,000 per annum	PI	2013-2018
National Science Foundation CAREER: Signal transduction of Eukaryotic Quorum Sensing \$125,000 per annum	PI	2004-2009
National Institutes of Health (NIGMS) SCORE program G Protein Signaling Crosstalk & Eukaryotic Quorum Sensing	Subproject P.I.	2004-2008
National Institutes of Health (NIGMS) SCORE program G Protein Signaling Crosstalk & Eukaryotic Quorum Sensing	Subproject P.I.	2000-2004

Book Chapters

Brazill, D and Knecht, D. (2022) Chemotaxis: Under Agarose Assay. *Methods Mol Biol.* 2364:327-38

Brazill, D (2015). Chemotaxis: Under Agarose Assay. *Methods Mol Biol.* 1365:339-46

Refereed Journal Articles

- Asante-Asamani E, Grange D, Rawal D, Santiago Z, Loustau J, Brazill D. (2022). A role for myosin II clusters and membrane energy in cortex rupture for *Dictyostelium discoideum*. *PLoS One.* 25;17(4)
- Umachandran S, Mohamed W, Jayaraman M, Hyde G, Brazill D, Baskar R. (2022). A PKC that controls polyphosphate levels, pinocytosis and exocytosis, regulates stationary phase onset in *Dictyostelium*. *J Cell Sci.*;135(9)
- Santiago, Z., Loustau, J., Meretzky, D., Rawal, D., Brazill, D. (2019). Advances in geometric techniques for analyzing blebbing in chemotaxing *Dictyostelium* cells. *PLoSOne.*;14(2)
- Singh, S., Mohamed, W., Aguessy, A., Dyett, E., Shah, S., Khan, M., Baskar, R. Brazill, D. (2017). Functional interaction of PkcA and PldB regulate aggregation and development in *Dictyostelium discoideum*. *Cell Signal.* 34: 47-54
- Mohamed, W., Ray, S., Brazill, D., Ramamurthy, B. (2015). Absence of catalytic domain in a putative protein kinase C (PkcA) suppresses tip dominance in *Dictyostelium discoideum*. *Dev Biol.* 405(1): 10-20
- Garcia M, Ray S, Brown I, Irom J, Brazill D. (2014). PakD, a Putative p21-Activated Protein Kinase in *Dictyostelium discoideum*, Regulates Actin. *Euk Cell.* 13(1):119-26
- Garcia, R., Nguyen, L., and Brazill, D. (2013). *Dictyostelium discoideum* SecG interprets cAMP mediated chemotactic signals to influence actin organization. *Cytoskeleton.* 70(5):269-80
- Maharjan, A., Roife, D., Brazill, D., and Gomer, R. (2013). Serum amyloid P inhibits granulocyte adhesion. *Fibrogenesis and Tissue Repair.* 6(1):2-18
- Pribic, J., and Brazill, D. (2012). Paxillin phosphorylation and complexing with Erk and FAK are regulated by PLD activity in MDA-MB-231 cells. *Cell Signal.* 24: 1531-1540
- Pribic, J., Garcia, R., Kong, M. and Brazill, D. (2011). Paxillin and Phospholipase D interact to regulate actin-based process in *Dictyostelium discoideum*. *Euk. Cell.* 10(7):977-84
- Gomer, R., Jang, W., Brazill, D. (2011). Cell Density Sensing and Size Determination. *Dev. Growth. Diff.* 53(4):482-94.
- Ray, S., Chen, Y., Ayoung, J., Hanna, R. and Brazill, D. (2011). Phospholipase D Controls *Dictyostelium* Development By Regulating G Protein Signaling. *Cell Signal* 23(2):335-43.
- Duran, M., B., Rahman, A., Colten, M., Brazill, D. (2008) *Dictyostelium discoideum* paxillin regulates actin-based processes. *Protist.* 160(2):221-32
- Brazill, D. and Gomer, R.H. (2008) A eukaryotic neighbor: *Dictyostelium discoideum*. *Myxobacteria: Multicellularity and Differentiation* 439-452
- Deenadayalan, B., Brazill, D., Gomer, R., H., Eichinger, L., Rivero, F., Noegel, A., A. (2007) An unusual G protein coupled receptor mediates cell density sensing in *Dictyostelium*. *Current Biology,* 17(10): 892-897

Thomason, P., A., Brazill, D., T and Cox, E., C.(2006) A Series of *Dictyostelium* Expression Vectors for Use With Recombination Cloning. *Plasmid*. 56(3): 142 - 152

Chen. Y., Rodrick, V., Yan, Y., Brazill, D. (2005) PldB, a Phospholipase D Homologue in *Dictyostelium discoideum* mediates quorum sensing during development. *Euk Cell*. 4: 694-702.

Gomer, R.H. and D.T. Brazill (2003). The versatile *Dictyostelium discoideum*. Meeting Report: International *Dictyostelium* Conference 2002. *Protist* 154, 11-16.

Bishop, J.D., B.C. Moon, F. Harrow, D. Ratner, R.H. Gomer, R.P. Dottin, and Brazill, D. (2002). A second UDP-glucose pyrophosphorylase is required for differentiation and development in *Dictyostelium discoideum*. *J. Biol. Chem.* 277, 32430-32437.

Brazill, D.T., Meyer, L.R., Diane Hatton, Debra A. Brock, Gomer R.H. (2001). ABC transporters required for endocytosis and endosomal pH regulation in *Dictyostelium*. *J. Cell Science* 114, 3923-3932.

Azhar, M., P.K. Kennedy, G. Pande, M. Espiritu, W. Holloman, D. Brazill, R.H. Gomer, and V. Nanjundiah (2001). Cell cycle phase, cellular Ca²⁺ and development in *Dictyostelium discoideum*. *Int. J. Dev. Biol. Apr*; 45 (2):405-14.

Brazill, D. T., Caprette, D., Myler, H.A., Hatton, R.D., Ammann, R.R., Lindsey, D.F., Brock, D.A. and Gomer R.H. (2000). A protein containing a serine-rich domain with vesicle fusing properties mediates cell cycle-dependent cytosolic pH regulation. *J. Biol. Chem.* 275, 19231-19240.

Brazill, D.T., D.F. Lindsey, J.D. Bishop, and R.H. Gomer (1998). Cell-density sensing mediated by a G-protein-coupled receptor activating phospholipase C. *J. Biol. Chem.* 273:8161-8168.

Jain, R., D.T. Brazill, J.T. Cardelli, J. Bush, and R.H. Gomer (1997). Autocrine factors controlling early development. In *Dictyostelium-A Model System for Cell and Developmental Biology*. (Y. Maeda, K. Inouye, and I. Takeuchi, Eds.) *Universal Academy Press, Inc., Tokyo, Japan*. pp. 219-234.

Brazill, D.T., J. Thorner, and G.S. Martin (1997). Mck1, a member of the glycogen synthase kinase-3 family of protein kinases, is a negative regulator of pyruvate kinase in the yeast *Saccharomyces cerevisiae*. *J. Bacteriol* 179:4415-4418.

Brazill, D.T., R. Gundersen, and R.H. Gomer (1997). A cell-density sensing factor regulates the lifetime of a chemoattractant-induced G α -GTP conformation. *FEBS Letters* 404:100-104.

Selected Invited Seminars and Presentations

2020 University of Connecticut, Storrs, CT

2017 City College, New York, NY

2017 International *Dictyostelium* Conference, Geneva, Switzerland

2015 International *Dictyostelium* Conference, London, United Kingdom.

2013 St. John's University, New York, NY

2013 Brooklyn College, New York, NY

2012 13th RCM International Symposium on Health Disparities, San Juan, Puerto Rico.

2012 Washington University, St. Louis, MO

2011 University of Maine, Orono, ME

2010 Texas A&M, College Station, TX

Derrick T. Brazill

- 2009 MIT, Cambridge, MA
- 2008 International *Dictyostelium* Conference, Tsukuba, Japan
- 2007 Morehouse College, Atlanta, GA
- 2007 Bard College, Annondale-on-Hudson, NY
- 2003 Queens College, Queens, NY
- 2001 Medical Research Council (MRC) Cambridge, England, United Kingdom
- 1997 Gordon Conference: Second Messengers and Protein Phosphorylation, Meriden, NH.