

Renu Jain, Ph. D.
Professor, Dept. of Biology/Nutrition
Houston Community College, Central College
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Academic Background:

- Ph.D. Biochemistry and Cell Biology, Rice University, Houston, Texas, 1994
- M.S. Botany, University of Delhi, New Delhi, India, 1987
- B.S. (Honors) Botany, University of Delhi, New Delhi, India, 1985

Grants and Fellowships:

- Participated in UST-HCC STEM Articulation grant, 2010 – 2015. The project was done in collaboration with Dr. Albert Ribes on Identification of the requirements for the telomeric localization of XRCC4.
- Course Developer, Fellowship for the development of Master Courses for Human Anatomy & Physiology I & II, 2011
- Co-Program Director USDA/CREES Grant Agreement 2008-38422-19137 (\$247,500), “ENGAGE: Empowering the Next Generation in Agriscience with Genomics Education”, 2008-2010.
- Co-Program Director USDA/CREES Grant Agreement No. 2006-38422-17154 (\$248,000), “Genetics Research Opportunities for Community Colleges”, 2006-2008.
- “Title V mini grant” to update web based 1308 Master course, 2007-2008.
- “Title V mini grant” to prepare web based 2401 Master course, 2007.
- Awarded the “Biology Team Leader Fellowship” Title V, HCCS, 2006
- Bedichek Professional enrichment grant awarded by HCCS to attend NABT Conference, 2006
- “Title V mini grant” to prepare web based 1308 Master course, 2005.
- “Title V mini grant” to enhance the study pages of Microbiology course, 2004.
- “Title V mini grant” to enhance the study pages of General Biology I and II course, 2003
- Bedichek Professional enrichment grant awarded by HCCS to attend Human Anatomy & Physiology Conference, 2001.
- Department of Defense Houston Community College Initiative to Enhance the Biology Curriculum, 2000.
- HCCS Faculty Technology fellowship Grant for improving Biology Departmental web page, 1999.
- Post-doctoral research grant, to study "Non-viral vectors for Gene Therapy," Howard Hughes Medical Institute, Houston, Texas, 1994-95.
- Welsh Foundation Fellowship, for Doctoral degree program, Rice University, Houston, Texas, 1993.
- Doctoral research fellowship, Howard Hughes Medical Institute, Houston, Texas, 1991-93.

Awards and Honors:

- Awarded “2017 Certificate of Teaching Excellence Honoree” for developing a CTLE certified Anatomy and Physiology Courses, Biol 2301 and 2302 course. HCC, May 2017
- Honored by being included in "Who's Who Among America's Teachers", 2004-2006.
- “Award for Innovation in Teaching” during Central College Fall Convocation, 2001
- Bhartiya Sathi Sangathan Award, in recognition for excellence in Graduate Studies and Research, New Delhi, India, 1988.
- Roll of Honor, University of Delhi, India, 1988.
- Chancellor's Gold Medal, University of Delhi, India, 1987

Teaching and Leadership Experience

- **Biology Professor, 1999 – Present;** Houston Community College District
Courses taught: Traditional, Web-enhanced, Hybrid, and Distance Education courses: Introductory Biology I & II (BIOL 1308, 1309), Introductory Biology I Lab (BIOL 1108), General Biology I & II (BIOL 1406, 1407), Human Anatomy & Physiology I & II (BIOL 2401, 2402), Learning Community Co-teaching (2010-2011)
- **Associate Chair, August 2015-December 2016;** Biology Department, Houston Community College District
Duties included- Advising on class scheduling at central College, Resolve faculty and students classroom related issues, Advice and mentor students to use various resources available, New faculty orientation and Overseeing biology labs at Central and Coleman.
- **Department Chair 2014-2015,** Department of Biology and Physical Sciences, HCC Central College
Duties included - Class scheduling, Hiring faculty, lab assistants, and biology tutors Resolve faculty and students classroom related issues, Advice and mentor students to use various resources available and set academic goals to succeed, Organize departmental seminars and workshops, New faculty orientation, Overseeing biology labs.
- **Lead Biology Professors 2013-2014:** Department of Biology and Physical Sciences, HCC Central College
Help the Department chair in all administrative work of Biology Classes and faculty
- Master Course Developer Developed Eagle Online Master courses (BIOL 2401, 2402)
- Author for lab manuals (BIOL1406, 1407, 2401, 2402, 2420).

Committees Served - (Past & Present)

- Biology Discipline Committee (1990-present)
- Introductory Biology, General Biology, human Anatomy & Physiology, Microbiology Curriculum Subcommittees (1999-present)
 - Chair of Introductory Biology Subcommittee: 2010-2017
- Screening Committee Chair to hire FT faculty in Biology Department, 2017.
- Participated in Screening Committee for Biology faculty multiple times.
- Hiring Committees for selection of Central College President, CIC lead, Director of Honors program at Central.
- Hiring committee for Lab Assistants in Biology.
- Grade appeal committee.
- DE sub-committee

Research Experience:

- 1994 - 95: Howard Hughes Medical Institute, Department of Cell Biology, Baylor College of Medicine, Houston, Texas.
 "Development of efficient non-viral vectors used in cancer gene therapy."
- 1989 - 94: Howard Hughes Medical Institute, Department of Biochemistry and Cell Biology, Rice University, Houston, Texas.
 "Cloning and Characterization of a density sensing factor."
- Conducted research experiments using various current techniques of Molecular Biology, Cell Biology and Biochemistry.

Publications:

- Published the following papers in national journals.
 - Jain, R., Brazill, D.T., Cardelli, J.A., Bush, J., and Gomer, R.H., "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 (1997), 219-234.
 - Yuen, I.S., Jain, R., Van Haastert, P.J.M., Gomer, R.H. "A density sensing factor controls signal transduction pathway in Dictyostelium." Journal of Cell Biology, Jun; 129 (5):1251-1262, (1995).
 - Jain, R., Gomer, R.H., "Characterization of a developmentally regulated cell surface receptor in Dictyostelium discoideum." Journal of Biological Chemistry, 269 (12):9128-9136 (1994).
 - Jain, R., Yuen, I.S., Taphouse, C.R., and Gomer, R.H., "A density sensing factor controls development in Dictyostelium." Genes & Development 6, 390-400 (1992).
 - Jain, R., Murtagh, J.J. Jr., Gomer, R.H., "Increasing specificity and yield from the PCR-RACE technique." Bio Techniques 12, 58-59 (1992).

Presented two research papers and eight abstracts in various local and national Conferences

Research Interest:

I have a strong background in molecular biology, cell biology and biochemistry. Collaborating with various educational institutions, like Texas A&M, University of Houston Victoria and Texas Medical Center in developing educational model involving our general biology, microbiology and genetics students in a common research projects. A recent project in progress is “Sequencing of Medicago and Sorghum genomic DNA”. Through the UST-HCC summer research funded by the CCRAA grant I am interested in collaborating with TSU faculty to learn tools and techniques and develop course modules that can be incorporated in General Biology, Anatomy and Physiology and Genetics courses at our institution.