



In Hak Moon

Professor of Mathematics
Chair, Department of Mathematics

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Education

Ph.D., State University of New York at Stony Brook
B.S. Chon Buk National University

Areas of Specialization/Expertise

- Computational Biology, High-Performance Parallel Computing, Computational Kidney Modeling.

Interested Areas of Research

- Computational Structural Biology, Algorithm Development in Computational Biology,
- Complex Networks in Biology, Large-Scale Molecular Dynamic Simulations.

Courses Taught

- College Mathematics, College Algebra, Pre-Calculus, Calculus I, Calculus II, Calculus III,
- Analytics Geometry, Linear Algebra, History of Mathematics, Probability and Statistics,
- Discrete Mathematics, Advance Linear Algebra, Numerical Analysis, Mathematical Logic,
- Mathematics Seminar.

Membership in Professional Societies

- Mathematical Association of America (MAA)
- Society for Industrial and Applied Mathematics (SIAM)
- Society for Mathematical Biology (SMB)
- American Mathematical Society (AMS)

Publications & Presentations

- In H. Moon and R. P. Tewarson, Multi-Nephron and Multi-Vasa Recta Models of the Inner Medullary Renal Concentrating Mechanism, Computers and Mathematics with Applications, 40(3), 345-357, 2000.

- In H. Moon and R. P. Tewarson, Numerical Solutions of Differential Equations for Renal Concentrating Mechanism in Inner Medullary Vasa Recta Models, *Computers and Mathematics with Applications*, 36(7), 69-78, 1998.
- R. P. Tewarson and In H. Moon, Renal Concentrating Mechanism: Central Core and Vasa Recta Models, *Applied Mathematics Letters*, 10(2), 39-44, 1997.
- K. Sun, In H. Moon, R. P. Tewarson and J. L. Stephens, Parallel Algorithms for Multi-nephron Renal Medullary Models, *Computers and Mathematics with Applications*, 33(6), 37-45, 1997.
- R. P. Tewarson and In H. Moon, Efficient Computational Algorithms for Kidney Modeling, *Applied Sciences, especially Mechanics (Minisymposia), ZAAM*, Vol. 76, Supplement 4, 51-54, 1996.