

Biographical Sketch:

Roger D. Quinn, Ph.D.

Education

<http://biorobots.cwru.edu>

Ph.D., Engineering Mechanics - Virginia Polytechnic Institute and State University, 1985

M.S.M.E. - The University of Akron, 1983

B.S.M.E. - The University of Akron, 1980

Appointments

2003-Present Arthur P. Armington Professor of Engineering

1997-Present Professor, Mechanical and Aerospace Engineering, CWRU

1992-Present Director of the CWRU Biorobotics Laboratory (<http://biorobots.cwru.edu>)

1992-97 Associate Professor, Mechanical and Aerospace Engineering, CWRU

1986-92 Assistant Professor, Mechanical and Aerospace Engineering, CWRU

1990-91, 1986-87 Summer Faculty Fellow at NASA Lewis Research Center

PI for Selected Awards:

Agile Manufacturing Project (1994-98) \$1.6 million

DARPA Biologically-Inspired Micro-Robots (1998 – 2002) \$2million

Selected Honors and Awards

- “Best Paper Award”- Webb, B.H., Reeve, R.E., Horchler, A.D., and Quinn, R.D., (2003) Testing a Model of Cricket Phonotaxis on an Outdoor Robot Platform, The 4th British Conference on (Mobile) Robotics, Towards Intelligent Mobile Robots (TIMR '03), Bristol.
- Robot III: Finalist in the 9th Annual Discover Magazine Technology Awards (1998).
- Robot II: Best Video Award, 1995 IEEE Int. Conference on Robotics and Automation
- General Motors Assistant Professor 1986-1989

Selected Patents

H.J. Chiel, E. Mangan, R.D. Beer, R.D. Quinn (2004), Hydrostatic peristaltic endoscope.

R.D. Quinn et al. (2002), Vehicle with Compliant Drive Train, pending.

Selected Publications (Out of total 150):

Espenschied, K. S., Quinn, R. D., Chiel, H. J., and Beer, R. D., (1996) Biologically-Based Distributed Control and Local Reflexes Improve Rough Terrain Locomotion in a Hexapod Robot. *Robotics and Autonomous Systems*, Vol. 18, pp. 59-64.

Quinn, R.D., Nelson, G.M., Ritzmann, R.E., Bachmann, R.J., Kingsley, D.A., Offi, J.T. and Allen, T.J. (2003), Parallel Strategies For Implementing Biological Principles Into Mobile Robots. *Int. Journal of Robotics Research*, Vol. 22 (3) pp. 169-186.

Allen, T.J., Quinn, R.D., Bachmann, R.J., and Ritzmann, (2003) Abstracted Biological Principles Applied with Reduced Actuation Improve Mobility of Legged Vehicles. IEEE Int. Conf. on Intelligent Robots and Systems (IROS'03), Las Vegas, Nevada.

Ritzmann, R.E., R.D. Quinn and M.S. Fischer (2004) Convergent Evolution and Locomotion through Complex Terrain by Insects, Vertebrates and Robots. *Arth. Struct. Dev.* **33(3)**:361-379.

Webb, B.H., Reeve, R.E., Horchler, A.D., and Quinn, R.D., (in press) New Technologies for Testing a Model of Cricket Phonotaxis on an Outdoor Robot, *Robotics and Autonomous Systems Journal*.