



Dr. Peixuan Guo
The Ohio State University



Director of Center for RNA Nanobiotechnology and Nanomedicine
College of Pharmacy and College of Medicine
The Ohio State University
BRT 418, 460 W 12th Street Columbus, Ohio, USA
Phone: 614-293-2114 / Email: guo.1091@osu.edu

Dr. Peixuan Guo received his Ph.D. in Microbiology and Genetics with training in biophysics from the University of Minnesota in 1987. He was a postdoc at NIH before joining Purdue University as an assistant professor in 1990, tenured in 1993, full Professor in 1997, and was honored as a Purdue Faculty Scholar in 1998. He founded two Interdisciplinary Graduate Programs and established a NIH Nanomedicine Development Center at Purdue. He was recruited to University of Cincinnati as the Dane & Mary Louise Miller Endowed Chair of Biomedical Engineering in 2007, and was Director of the NIH Nanomedicine Development Center relocated from Purdue to University of Cincinnati. He moved to University of Kentucky as William Farish Endowed Chair in Nanobiotechnology in 2012, and was the UK Director of Nanobiotechnology Center. He moved to The Ohio State University as the Sylvan G. Frank Endowed Chair in 2016 and is currently the Director of Center for RNA Nanobiotechnology and Nanomedicine at OSU. He is also the Director of NCI Cancer Nanotechnology Platform Partnership Program in RNA Nanotechnology for Cancer Therapy.

He constructed the first viral DNA packaging motor in vitro (*PNAS*, 1986), discovered phi29 motor pRNA (*Science*, 1987), assembled the first infectious dsDNA viruses using synthetic and purified components (*J Virology*, 1995), discovered pRNA hexamer (*Mol Cell*, 1998, featured in *Cell*), and pioneered RNA nanotechnology (*Mol Cell*, 1998; *JNN*, 2003; *Nano Letter*, 2004, 2005; *Nature Nanotech* 2010, 2011). His lab built a dual imaging system to detect single-fluorophores (*EMBO J*, 2007; *RNA*, 2007), incorporated the phi29 motor channel into a lipid membrane (*Nature Nanotech*, 2009) for single molecule sensing with potentials for high throughput dsDNA sequencing. Recently, his lab discovered a third class of biomotor using revolution mechanism without rotation (<https://www.youtube.com/watch?v=LpUGuEQos6Y>). His accomplishments were featured in the web site of NIH Director Collin's office as YouTube. (<https://www.youtube.com/watch?v=rRGYHFulzkQ>).

He received the Pfizer Distinguished Faculty Award in 1995; the Purdue Faculty Scholar award in 1998; the Lions Club Cancer Research Award in 2006; Distinguished Alumni of the University of Minnesota twice in 2009; 100 Years Distinguished Chinese Alumni of the University of Minnesota in 2014; and many others. He is an editor or board member of several nanotechnology journals. His work has been reported hundreds of times over the radio or TV such as ABC, NBC, BBC, and featured in Newsletters or websites of NIH, NSF, MSNBC, NCI and ScienceNow etc. He was a member of two prominent national nanotech initiatives sponsored by NIST, NIH, NSF and National Council of Nanotechnology; director of one NIH Nanomedicine Development Center from 2006 to 2011; member of the NIH NDC Steering Committee from 2006-2010; NIH/NCI intramural site-visit Review Panel at 2010 and 2014; panelist for DOD-US Army, Navy & Air Force Jointed Medical Program in 2003; and member of the Examination and Review Panel (Oversea Expert) of the Chinese Academy of Sciences since 2014.