

## Nano Life Science Institute (WPI-NanoLSI) Open Seminar

### Physical Biochemistry of Disease

**Damien Hall**

*Australian National University, Research School of Chemistry  
Osaka University, Institute for Protein Research*

**March 2<sup>nd</sup>, 2018 (Fri) 14:00-15:00  
Room 302 (Natural Science Building, 3F)**

#### **Abstract**

My research program involves the application of physical chemistry / biophysics type theoretical and experimental approaches to the study of three disease states (i) cancer, (ii) virus infection, and (iii) amyloidosis proteopathies. In this talk a brief introductory survey of these three areas will be made before focussing on recent research progress related to the amyloidosis diseases.

#### **References**

- D Hall, A Kinjo, Y Goto (2018) 'A new look at an old view of denaturant induced protein unfolding Analytical biochemistry 542, 40-57.
- D Hall, R Zhao, M So, M Adachi, G Rivas, JA Carver, Y Goto (2016) Recognizing and analyzing variability in amyloid formation kinetics: Simulation and statistical methods Analytical Biochemistry 510, 56-71.
- D Hall, H Edskes (2012) Computational modelling of the relationship between amyloid and disease. Biophysical reviews 4 (3), 205-222.
- D Hall, R Zhao, I Dehlsen, N Bloomfield, SR Williams, F Arisaka, Y Goto and JA Carver (2016) Protein aggregate turbidity: Simulation of turbidity profiles for mixed-aggregation reactions. Analytical Biochemistry 498, 78-94.

Language: English

Organizer: WPI-NanoLSI

Contact: Toshio Ando (076-264-5663)