Alberta Prion Research Institute

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APRI Executive Director, Alberta Innovates Bio Solutions
Prion Institute

• $50 million over ten years
• Funding research for prion diseases and prion-like human neurodegenerative diseases
Connections

And growing...
Investing in Expertise

- **38** world-class prion and misfolded protein researchers

- More than **250** young professionals conducting prion research
  - Graduate students
  - Post-doctoral fellows
  - Research associates
  - Highly-trained research technicians
Infrastructure Support

- **2006**: $2M to UofA for equipment and building costs (levered to total $22.9M)
- **2008-2009**: $1.9M to UofC for a Biosafety Level 2 Lab (levered to $4.3M total)
Funding by Area

Projects funded by area

- SRM
- Social
- Human diseases
- CWD
- BSE

Projects funded by area

0 5 10 15 20 25 30
Normal Prion and AD

- David Westaway and Jack Jhamandas
- Pro-pathogenic role of normal prion protein in Alzheimer’s Disease
Copper, PrP$^C$ and AD

- Gerald Zamponi and Peter Stys
- Critical relationship between copper binding to normal prion and interaction between normal prion and Aβ
Protein Misfolding Process

- David Wishart
- Steps in the misfolding of prion proteins
Next Three Years

• $15 million over three years

Approximate investment:

• 40% for BSE and Specified Risk Material (SRM)
• 30% for Chronic Wasting Disease (CWD) and scrapie
• 30% for prion-like protein for human neurological diseases
New Opportunities

- Solutions to the problems of specified risk material (SRM)
- Improved management of chronic wasting disease (CWD)
- Links between prion diseases and human neurodegenerative diseases
New Programs

- Open competition – new ideas
- Targeted competition – existing partners
- National and international collaboration program – APRI 80%/partner 20% funding
- University – industry program
- Alberta and Northwest Territories Alzheimer Disease – APRI Partner Program – regular and new investigator grants
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