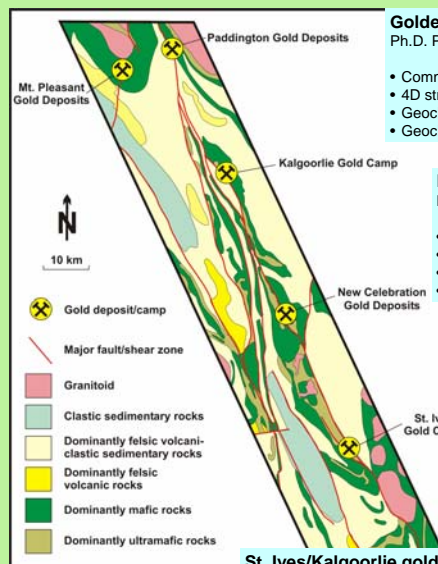


Y3/M358

Scale-Integrated Studies of the Eastern Goldfields Province: From Brownfields to Greenfields Exploration

Research, Education & Training

The Team



Golden Mile:

Ph.D. Project – Louis Gauthier

- Commenced 11/02
- 4D structural and hydrothermal evolution
- Geochemical footprints of alteration
- Geochemical vectors to ore

Kambalda-Kalgoorlie area:

Ph.D. Project – Joanna Hodge

- Commenced 04/03
- 4D structural and hydrothermal evolution
- Geochemical footprints of alteration
- Fluid chemical footprints

Kalgoorlie-Kambalda area:

Ph.D. Project - Mherdad Heydari

- Commenced 05/03
- Study of ultramafic rocks
- Hydrothermal alteration
- 4D models of alteration
- Significance for gold mineralization

St. Ives/Kalgoorlie gold camps:

Completed Student Projects

Argo (St. Ives gold camp): Honours Project – Dan Howe (2002)

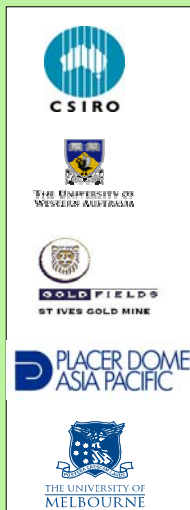
4D evolution of hydrothermal alteration

Junction (St. Ives gold camp): Honours Project – Kate Moran (2003)

4D evolution of hydrothermal alteration and fluids chemistry

New Celebration: Honours Project – Sian Nichols (2003)

Structural timing of gold mineralization



John Walshe & Leo Horn

Peter Neumayr, Steffen Hagemann, Louis Gauthier, Mherdad Heydari, Joanna Hodge & Honours students, Bill Stone (adjunct. Researcher)

Bob Morrison, Karen Connors, & Ned Stolz

Scott Halley & Greg Hall

Dr. Glen Masterman

Research Coordinators:

Y3: Peter Neumayr, Steffen G. Hagemann
M358 : John L. Walshe

- Camp- to deposit-scale alteration models through time
- 4D hydrothermal alteration models
- Chemical footprints of hydrothermal alteration/fluids
- Conceptual structural and geochemical hydrothermal alteration models
- Geochemical targeting models

Key Themes:

- Scale integrated structural-hydrothermal alteration models
- Chemical gradients
- Contrasting fluid systems

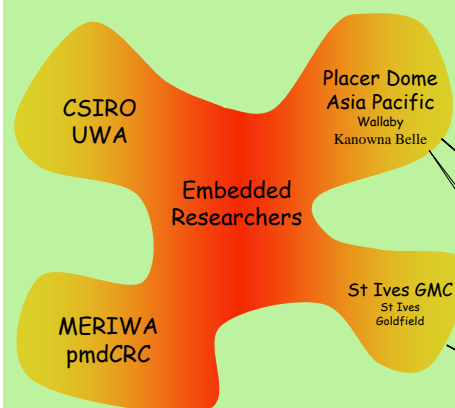
Y1

Y2

Y3/M358

AGCRC heritage
Answer 5 QUESTIONS:

- Structure Architecture
- Geodynamic setting
- Reservoirs
- Fluid drivers
- Transport / deposition



Embedded Researchers

- ✓ Based on-site
- ✓ High-tech analyses at university and CSIRO
- ✓ Focus research activity on-site
- ✓ Raising on-site awareness of research & potential benefits
- ✓ "Real-time" transfer of research outcomes into targeting process
- ✓ Lots of reporting via posters & on-site informal meetings



Industry Mentors:

- Greg Hall
- Cam McCuaig
- Francois Robert
- Cees Swager
- Walli Witt

Embedded Researchers

Wallaby: Susan Driberg – embedded Researcher Placer

- Will commence 01/04
- Alteration and structural mapping at KB
- Targeting using alteration mapping
- Communication of research results on site

Kanowna Belle: Glen Masterman – embedded Researcher Placer

- Commenced 07/03
- Alteration mapping at KB
- Testing of PIMA and ASD for alteration mapping
- Targeting using alteration mapping
- Communication of research results on site

St. Ives gold camp: Leo Horn – embedded Researcher SIGMC

- Commenced Feb. 2003
- Redox alteration mapping in the St. Ives gold camp
- Testing of PIMA and ASD for alteration mapping
- 3D redox model
- Targeting using redox and alteration mapping
- Communication of research results on site