Wednesday, July 24th:

4:00 – 5:00  Arrive and check into Hope College
5:00 – 6:00  Dinner

**Welcoming Reception**
6:15 – 6:30  Course overview and purpose - Ashley Makela (MSU) and John Ronald (Western)
6:30 – 7:30 Molecular imaging research and training, facilities, educational strategies and potential routes for collaboration
  - Paula Foster, PhD – Western Molecular Imaging Graduate Program
  - Christopher Contag, PhD – IQ and Integrating Imaging into Biomedical Research
  - Kurt Zinn, PhD – Academic success and foundational training
  - Savita Dhanvantari, PhD – Equity and Diversity in Molecular Imaging - the WIMIN Perspective

7:45 – 10:00 Networking event

Thursday, July 25th:

7:00 – 8:00  Breakfast
8:15 – 9:45  **Instructional Session 1: The Clinical Need for Molecular Imaging**
  - Mark DeLano: Clinical Needs and Applications of MI
  - Adam Alessio: Physics of Clinical Molecular Imaging
9:45 – 10:15  Break (Poster session)
10:15 – 12:00  **Instructional Session 2: Starting at the Cellular Level – Microscopic Investigation**
  - Ripla Arora: Confocal and Molecular Microscopy
  - Taeho Kim/Bryan Smith: Ultrasound & photoacoustics
12:00 – 1:00  Networking Lunch
1:15 – 2:45  **Instructional Session 3: Shining the Light on Reporter Genes – Optical, Intravital and Other Imaging Modalities**
  - Zhen Qiu/Bryan Smith: Optical and Intravital Imaging
  - John Ronald/Michael Bachmann: Reporter genes for different modalities/Basic and advanced cell engineering techniques
2:45 – 3:15  Break (Poster session)
3:15 – 5:00  **Instructional Session 4: Nuclear Medicine – Physics, Instrumentation and Imaging Methods**
  - Kurt Zinn/Jonathan Thiessen: PET, SPECT and radiotherapy, PET/MRI
  - Justin Hicks/Ting Lee: Short Half-life Radiochemistry and Kinetic modelling
5:00 – 6:15  Dinner

Please note that the program is subject to minor changes.
6:15 – 8:30  Evening research talks
  • Anna Moore: Nanomedicine and Image Guided Therapy
  • Savita Dhanvantari: Using targeting imaging approaches to identify disease biomarkers
  • Masamitsu Kanada/Masako Harada: Imaging EVs

8:30 - 10:00  Pub night

Friday, July 26th:

7:00 – 8:00  Breakfast
8:15 – 9:45  Instructional Session 5: Magnetic Resonance Imaging (MRI) – Instrumentation and Image formation
  • Erik Shapiro/Assaf Gilad: MRI basics, instrumentation for molecular imaging and MR contrast formation
  • Galit Pelled: Functional MR imaging
9:45 – 10:15  Break (Poster session)
10:15 – 12:00  Instructional Session 6: MRI Applications and Magnetic Particle Imaging (MPI)
  • Peter Wang/Timothy Scholl: MRI of metabolism
  • Paula Foster: Cellular MRI and MPI – Principles and practice
12:00 – 1:00  Lunch
1:00 - 6:00  Free time and networking events

Closing reception
6:00  Dinner
7:00  Keynote
8:00 – 10:00  Reception, awards

Saturday, July 27th:

7:00 - 8:00  Breakfast
8:15 – 10:30  Closing
11:00  Check-out

Please note that the program is subject to minor changes.