



**FRAUNHOFER PROJECT CENTRE**  
**for**  
**BIOMEDICAL ENGINEERING**  
**& ADVANCED MANUFACTURING**  
**(BEAM)**

May 7, 2014



# McMaster University and Fraunhofer-IZI Collaboration

- The Fraunhofer-IZI Institute for Cell Therapy and Immunology (Leipzig-Germany) has expressed significant interest in working with McMaster University and the City of Hamilton
- Fraunhofer-IZI has a keen interest in a number of research areas in which McMaster University is recognized as a global leader
- Fraunhofer-IZI has expressed a strong interest in locating a project centre at the McMaster Innovation Park (MIP) that will focus on Cell Therapies, Biomedical Engineering and Advanced Manufacturing



# The Project Centre – What it Means for Hamilton

- Development of new biomedical industry for Hamilton
- At maturity, the project centre is expected to directly create 70 jobs – many will be filled by highly qualified individuals relocating to Hamilton with their families from across Canada and from overseas
- Attract visiting scientists and industry leaders from around the world to collaborate on projects unique to the Hamilton facility
- Spin-off opportunities will create significant economic development for Hamilton – over a five-year cumulative period, the Centre is forecasted to generate \$70M in economic impact (Deloitte Report)



# Attracting New Industry

- This collaboration between McMaster and Fraunhofer-IZI has attracted the attention of many companies, some of which are clients of Fraunhofer in Europe, interested in establishing themselves in the vicinity of the project centre including:
  - Miltenyi Biotec, Bergisch Gladbach
  - SoNovum AG, Leipzig
  - TissUse GmbH, Berlin
- Others interested in Good Manufacturing Practice (GMP) automation projects at BEAM:
  - Prima BioMed, Australia
  - Northwest Biotherapeutics, United States
  - Biospherix Ltd., United States
  - Corning, United States
  - Qiagen, Germany
- Exploring opportunities with 31 other North American companies



# Proposed Funding Costs

## Total Project Costs over 5 Years

- **Estimated Total Project Costs:** **\$40 Million**
  - Renovations/Fit-Out: **\$20 Million**
  - Operating: **\$20 Million**



# Proposed Funding: Renovations and Fit-Out Costs

McMaster University: 40,000 – 50,000 sq. ft. at MIP warehouse @ \$100/sq ft	\$ 4 Million <b>CONFIRMED</b>
Province of Ontario:	\$ 4 Million <b>CONFIRMED</b>
Federal Development Economic Agency for Southern Ontario (FedDev):	\$ 8 Million
City of Hamilton:	\$ 4 Million



# Proposed Funding: Operating Costs

- Estimated operating costs over five years is up to \$20 Million equally shared by the partners through grants and contract research