POLITECNICO DI MILANO

# PhD in INGEGNERIA GESTIONALE / MANAGEMENT ENGINEERING - 38th cycle

## THEMATIC Research Field: DEVELOPMENT, ASSESSMENT, AND DIFFUSION OF ADVANCED THERAPIES

| Monthly net income of PhDscholarship (max 36 months) |
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| **€ 1450.0**<br>In case of a change of the welfare rates during the three-year period, the amount could be modified. |

| Context of the research activity | |
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| **Motivation and objectives of the research in this field** | Advanced therapies refer to novel medical technologies that use gene therapy, tissue engineering, cell therapy, etc. They can be used to treat diseases or injuries, such as skin in burns victims, Alzheimer's, and cancer or muscular dystrophy. Advanced therapies are expected to change and improve future of medicine.<br>Despite this potential, the different stakeholders of the healthcare industry (policy makers, regulators, standard makers, payers, health professionals, patient advocacy groups, etc.) are questioning how they are developed, assessed, and diffused.<br>Traditional theories, techniques from health economics and healthcare innovation management are not able to deal with the peculiarities of advanced therapies along their life cycle, from lower (research and development) to higher technology readiness levels (market access and commercialization).<br>Against these gaps in our current understanding, this doctoral research aims at advancing both theory and practice of how to improve the various phased of the life cycle of advanced therapies in terms of development, assessment, adoption, and diffusion in healthcare.<br>This doctoral research will take advantage of the many empirical opportunities offered by the permanent "Life Science Innovation" Observatory at the POLIMI School of Management. |
| **Methods and techniques that will be** | The research design will combine both quantitative and |

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| **developed and used to carry out the research** | The research design will combine both quantitative and qualitative methods. In particular, the PhD Student will carry out, under the supervision of the research group, desk analyses, analysis of already available databases, surveys to collect primary data, in-depth multiple case studies through interviews and document analysis. |
| **Educational objectives** | Beyond developing a distinctive understanding of the Healthcare and Life Science/MedTech industries from the theoretical perspective of Healthcare Management, Entrepreneurship, Innovation Management, Accounting and Finance, the PhD Student will learn how to design a sound research project, how to develop a new theory and validate it through a robust research design. The PhD Student will learn how to interact with the scientific community (i.e., conferences and journals) and with leading companies and Institutions. |
| **Job opportunities** | At the end of his/her PhD, the selected Student will have the opportunity to explore - together with the research group and his/her supervisor - different job alternatives, such as remaining in academia with a post-Doc position within the research group or in other Business Schools; applying for a position in enterprises, consultancy firms or Institutions interested to the distinctive competences and network of contacts developed during the PhD. |
| **Composition of the research group** | 4 Full Professors<br>3 Associated Professors<br>3 Assistant Professors<br>11 PhD Students |
| **Name of the research directors** | Proff. Emanuele Lettieri e Giovanni Toletti |

| **Contacts** |
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| Prof. Emanuele Lettieri, emanuele.lettieri@polimi.it<br>Prof. Giovanni Toletti, giovanni.toletti@polimi.it |

| **Additional support - Financial aid per PhD student per year (gross amount)** | |
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| **Housing - Foreign Students** | -- |
| **Housing - Out-of-town residents (more than 80Km out of Milano)** | -- |

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| Scholarship Increase for a period abroad | |
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| **Amount monthly** | 725.0 € |
| **By number of months** | 6 |

| **Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information** |
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| The selected PhD Student will be offered the opportunity to develop teaching capabilities through the involvement as a teaching assistant in one of the courses chaired by the Professors affiliated to the research group, also according to her/his attitude and interests. Courses cover topics about Finance, Innovation, Entrepreneurship, Business Administration, with particular emphasis to Healthcare and Life Science.<br>There will be the opportunity to be involved in the development of new educational programs both at the Master of Science level and the post-graduate level (jointly with the POLIMI Graduate School of Business).<br>The selected PhD Student will have desk availability and the opportunity for smart working two days per week. |