

Stem cell industry

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Medical director, Cordlife Sciences India, says that the stem cell industry is witnessing a boom, particularly in the area of biotechnology

Stem cell banking involves collection, processing and storage of stem cells. Of late this industry has opened up new employment avenues and is attracting entrepreneurs, doctors, stem cell biologists, biotechnologists, laboratory technologists and quality assurance and related personnel. It also employs a new breed of marketing and sales personnel, who are instrumental in giving shape to the idea of 'concept selling' in this domain.

EMERGING TRENDS

Today protocol-based therapy is the buzzword in stem cell banking. It was proved long ago that stem cells can produce many different types of cells and are successful in curing certain diseases in animal models. By virtue of protocol-based therapy the attempt now is to prove their worth in real life situations. However, the challenge plaguing this field lies in the fact that the medical fraternity has its own reservations in terms of any new form of therapy. This challenge needs to be addressed by the upcoming breed of researchers and practitioners and they need to engage more and more volunteers in clinical research and address those specific diseases that seem curable only through stem cell therapy.

INDUSTRY STATUS

In most established markets of West and South East Asia, the industry growth is about 18% to 20%. Some new players have experienced robust growth of about 250% to 350%. Also despite the economic slow down, this multibillion-dollar industry has shown no slowdown globally. This can possibly be attributed to the fact that the major players are located in India and China.

Growth areas abound for research and research implementation personnel. There is also an increasing demand for skilled bio-technologists. Since the field is in a nascent but growing stage it offers employment scope for a wide array of professionals like entrepreneurs, medical specialists, scientists, laboratory bio technologists, marketing and sales personnel,



finance and accounting professionals, software development people and quality control and quality assurance personnel, among others.

SKILL-SETS REQUIRED

The basic qualification required for pursuing a career in the sales and marketing fields would be an interest in bio science coupled with a graduate degree. For a doctor, the primary qualification would be MBBS and experience with stem cell and its banking and cryogenic manipulation. For a scientist, Bachelor's or Master's in bio-technolog coupled with tissue handling skills and skills in cell culture would be necessary. PhD would be an added asset. Laboratory bio-technologists would require to be graduates in bio-science with diploma and/or degree in medical laboratory technology. Work experience in a component producing blood bank would be an added edge.

MARKET MANTRA

REMUNERATION

Freshers can expect starting salaries of five figures along with the usual perks. Higher up the career rung the average salary can range between 12 lakh to 18 lakh per annum along with perks. The medical doctor as a medical director would be entitled to a package of 10-18 lakh as consolidated yearly package while technical directors can expect anything between 8 lakh-15 lakh as consolidated yearly package. Regional sales managers can manage to earn 5lakh -6 lakh per annum.

INSTITUTE LISTING

National Institute of Cell Science, Pune, is offering PhD in this field. International Institute of Information Technology, under Ignou Center of Excellence for Advanced Education and Research, Pune, also provides two courses — MS in bio technology with specialisation in molecular medicine and MS in bio-technology with specialisation in stem cell biology. Both these full time residential courses are of two years duration. A Bachelor's or Master's degree in bio-technology and bio informatics, in any branch of life sciences, medical sciences or pharmaceutical sciences is the requirement in terms of eligibility.

— As told to Sakshi Khattar