



Gurunanak College of Pharmacy

INDOCTRINATE

NEWSLETTER

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Editorial Board.....

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Section I: Technical Article

BIOTECHNOLOGY: IN FUTURE

Krishnakant B. Bhelkar

Dear friends, can you imagine the world without any disorders in human beings, animals and plants, no environmental damage due to industrial growth, no shortage of food and energy on earth? All these are the major problems faced now days by the entire ecosystem and scientists are continuously taking efforts in this direction. The ultimate answer to all these problems can come through an interdisciplinary branch of science i.e. Biotechnology.

As the name indicates biotechnology is just a fusion of biology and technology, but it touches various aspects of science like chemistry, molecular biology, genetics, microbiology, informatics and process engineering. It can again be studied under different heads depending on its applications like molecular biotechnology, pharmaceutical/medical biotechnology, food biotechnology and industrial biotechnology.

The secrets of life lie in the genes of chromosomes in living creatures and all the processes occurring are controlled by these genes. Genetics is the branch that deals with the study of genes. Gragor John Mendal evolved this area with his laws of inheritance and they play vital role in understanding genetic characteristics. Isn't this surprising that simple chemical moieties transfers the hereditary characteristics from one generation to another? The fact provided a base to human genome project, which came forward with a preliminary aim to determine the nucleotide sequence of the entire human nuclear genome. This was expected to finish in 2012, but was completed in 2008 itself, and the next objective in the process is to link these genes with various hereditary parameters and disorders in human. Yes, this may help in revealing mysteries behind various disorders, either monogenic like sickle cell anemia, cystic fibrosis and retinoblastoma or of polygenic and complex disorders like cancer, hypertension and diabetes. It is not impossible to cure all those diseases at embryo level in future and we may see disease free generations of humans on earth.

Clone is another successful product of biotechnology in recent years, which seemed to be impossible few years back. But now it is well known that alike creatures can be created from mother creature with this technique. In this entire technique genome containing embryo is transferred in surrogate mother or can even be grown artificially. With the help of recombinant DNA technology in cloning we can even bring smaller changes in genetic code.

Recombinant DNA technology is again having application in pharmaceutical science, medical and food biotechnology. Various biotechnological products like vaccine and antibiotics are used in treatment of diseases and disorders in human now days and many products like cheese, bread, yoghurt etc are used as a food. Fermentation with the help of suitable microorganism is an important process in production of most of these. With the help of tools like genetic modification by recombinant DNA technology we can increase the production rate by multifold. This will be helpful in removing food scarcity in world in future and again will be helpful in reducing cost of pharmaceuticals.

DNA vaccines have proven to be an alternative to conventional vaccine in same disease. In this naked genes are inserted in an individual which helps in creating immunity in individuals. Now a day's many countries are avoiding vaccination of rare disease because of the fear of vaccination induced disease. But as DNA vaccine will be in a purest form, there will be no chance of virulence factors to get transmitted while vaccination. Again with the help of process of polymerase chain reaction, it will be easier to prepare than the conventional methods of vaccine preparation.

Energy production has become a headache for various developing countries like India and due to limited traditional sources, search of new nonconventional energy sources is in full swing. Biotechnology can help in this aspect too, by providing biofuels from biomass or industrial waste. Biomass provides renewable energy source as we can replenish its supply. It causes no net increase in carbon dioxide emission. Alcohol and methanol are commonly used biofuels, and their use is increasing day by day.

Last but not the least, biotechnology can also help us to protect our environment from industrial waste products. Microbial load can simply digest the complex molecules formed in an industry to simpler harmless chemicals, which can be safely returned back to nature. Damage to organisms can also be measured by biotechnological methods, such as genotoxicity tests detecting genotoxic lesions of cellular organelles, while cytotoxic tests measure chromosomal damages.

Thus, biotechnology is a branch having caliber to cause betterment of life on earth and will be helpful to solve various problems. Research in biotechnology takes time to bear fruits, but whenever it does, the investment is worth.

Section II: Campus Report of past 6 months

It shall be constant endeavor of Gururnanak college of Pharmacy to meet the educational need of youth in the area of pharmaceutical sciences and provide learning opportunity along with inculcation of values of commitment and uprightness. This institution is doing well in accomplishing this task. As on today, we have diploma course- D. Pharm, degree course- B. Pharm and Post graduate course- M. Pharm in Pharmaceutics, Quality assurance and Pharmaceutical chemistry.

❖ HIGHLIGHTS

- College got approval from Pharmacy Council of India.
- Applied for National Board of Accreditation.

❖ FACULTY ACHIEVEMENTS

- **Dr. S. R. Walde** promoted as Professor in Quality Assurance.
- **Mr. D. P. Dharkar** and **Mr. S. P. Padmane** promoted as Asst. Professor in Pharmaceutical Chemistry.
- **Mr. D. P. Dharkar** and **Mr. M. V. Malhar** participated and won 3rd prize in Cricket Quiz competition held at Hislop College, Nagpur on 14th May 2011.

❖ STUDENTS ACHIEVEMENTS

➤ M. Pharm Result:

Sr. No.	Branch	% Result	Topper
1	Pharmaceutics	90.00	Mahesh Patil (408/600)
2	Pharmaceutical Chemistry	83.33	Nikhil Pawankar (400/600)
3	Quality assurance	83.33	Mahesh Wazade and Piyush Atre (393/600)

➤ GPAT Result:

Following student qualified the entrance examination for M. Pharm. (GPAT- 2011).

S. N.	NAME OF STUDENT	AIR
1	Bharat Wadhwani	1116
2	Pallavi Sonkusare	1734
3	Aparna Awasthi	2469
4	Shikha Barve	2726
5	Jagjit Singh Panesar	3139
6	Mohd Shoeb Mohd Haneef	3579
7	Pallavi Deshpande	4934
8	Jayesh Chandal	5100
9	Heena Kausar	5138
10	Mohd Shoeb Mohd Shamim Sheikh	6150
11	Chetana Waghmare	6773
12	Amit Khandagade	7756
13	Santosh Mangol	8211
14	Rajshri Tade	9952

➤ MBA Entrance:

S. N.	NAME OF STUDENT	Name of Exam	% Score
1	Jagjit Singh Panesar	CET	88.73
		CAT	64.21
2	Shweta Gaikwad	CET	86.06
		CAT	54.68
3	Girish Alaspure	CET	70.14
		CAT	32.03
4	Krishnvadan Patel	CAT	64.07
5	Zishan Opai	CET	66.20

➤ Prize Winner:

Amit Khandagade (B. Ph IV) and Raghavendra Rai (B. Ph III) won runner up prize in quiz comp. organized by IPER, Wardha on 31-1-11.

➤ Sports Activity:

College Cricket team participated in State level pharma cricket tournament in Pharma youth festival organized by Dr. J. D. Pawar College of Pharmacy, Manur, Nashik during 20th to 24th Dec 2010. The member of team include Mr. G. A. Gurunani (Sport Incharge), Mr. P. D. Wanhkede (Team manager), Pranay Thakre (Captain), Amit B. Singh, Dharmpal Waghmare, Ravindra Bonde, Abhijit Dambhare, Bharat Wadhawani, Rahul Jawarkar, Avinash Chaware, Jaypal Upadhyay, Rahul Dugane, Mohd Opai, Gyaneshwar Darode, Dinesh Thote, Devanand Rathod and Abhijeet Pawade.

❖ EVENTS ORGANIZED

➤ Publication of annual Magazine:

College published annual Magazine “Zenith 2011” which reflects the creativity of students and glimpses of past activities.



➤ Republic day celebration:



College celebrated 62nd the Republic day with zeal and zest. The flag hoisting was carried out by Sardar Parshan Singh Kalsi, Ex MLC and General Secretary of the Sikh Education Society. The function was followed by cultural programme and refreshment for staff and students.

➤ **Campus interview:**

Pharmexx India Ltd. And Becton Dickin Son India Ltd. conducted campus interview for marketing.

➤ **Faculty Lectures:**

- **Dr. N. P. Sapkal** delivered enthusiastic lecture on 'How to think: a rational approach' on 23rd April 2011.

❖ **EXTRACURRICULAR ACTIVITY**

For the all round development of a student, it is essential that avenues for partaking in extracurricular activities be available. It is with this view, that extracurricular activities are conducted regularly to enable students to discover and hone their skills in fields that are not academic in nature.

➤ **ANNUAL GATHERING**

Annual Social gathering "Zenith-2011" was conducted during 17th to 23rd Jan 2011.

➤ **SUBJECT TOUR**

Environmental Science subject tour was arranged to Ghodazari, Dist. Nagpur on 10th March 2011. 63 students of B.Pharm II year along with faculty members Dr. S. K. Tilloo, Dr. S. B. Waikar, Dr. V. A. Kilor, Mr. Hate and Mr. V. B. Pande participated.

❖ **RESEARCH ACTIVITY BY STUDENTS**➤ **Poster Presentations**

- M. K. Patil, V. M. Kavade, R. P. Sinha; Detection of trace amount of dimethyl sulphate or diethyl sulphate; industry defined problem solved at Young Innovator choice competition held at ICT Mumbai.
- G. Vaidya, S. Mhaskar, P. Tawari; Chitosan as versatile polymer; in Young research conference held at ICT Mumbai.
- K. Patel, A. Damhare, V. Agnihotri, M.M. Bodhankar; The protein scaffold associated with the polymeric encapsulated dosage formulation, degradation and *in vitro* assessment; in 62nd IPC held at Manipal.
- B. Chatur, S. Mahajan, V. Agnihotri, M. M. Bodhankar; Kinetic study of delayed release aspirin tablet by spectrophotometric estimation at pH=pKa; in 62nd IPC held at Manipal
- B. Panda, V. A. Kilor, N. P. Sapkal, A. M. Ittadwar; Formulation and development of microemulsion based hydrogel of poorly soluble NSAID for transdermal application; in 62nd IPC held at Manipal
- A. Chawardol, U. Shivhare, D. Pardhi, D. Vishwakarma; Formulation and *in vitro* evaluation of self emulsifying drug delivery

system containing carvedilol; in 62nd IPC held at Manipal.

- T. Chaudhari, S. Waikar, J. Baheti, A. M. Ittadwar; Preliminary phytochemical screening and hepatoprotective activity of *Lepidagathis Cristata willd.*, in 62nd IPC held at Manipal.
- P. N. Atre, S.B. Waikar, S. N. Shinde, A. M. Ittadwar; Development and evaluation of fast dissolving tablet of cinnarizine; in 62nd IPC held at Manipal.

❖ **RESEARCH AND DEVELOPMENT ACTIVITY OF THE FACULTY**

The institute is inspired by identifying future needs of human resources to be felt by fast developing academics and scientific research at national and international level in the area of pharmaceutical sciences.

- **Mrs. V. A. Kilor** is awarded with Ph. D. for the research topic "Design and evaluation of modified release formulations of drug used in Rheumatoid Arthritis" under the Guidance of Dr. (Mrs.) J. G. Avari from Dept. of Pharmaceutical Sciences, RTM Nagpur University, Nagpur.

➤ **Research Article Presented:**

- V. V. Kale, G. K. Lohiya, S. S. Yadav, T. M. Rasala; A blended teaching model: enhancing pharmacy students conceptual understanding on acid base concepts; in 62nd IPC held at Manipal.
- D. P. Dharkar; Formulation and evaluation of cosmeceuticals for dermatological use; in International conference on chemistry for mankind at Nagpur.
- A. H. Deshpande; Rice bran wax in pharmaceutical formulation; in International conference on chemistry for mankind at Nagpur.
- D. P. Dharkar and M. V. Malhar; UV- Visible spectrophotometer method for development of Pantoprazole tablets; in International conference on chemistry for mankind at Nagpur.
- N. P. Sapkal, M. N. Bonde, A. S. Daud, P. P. Katariya; Hot melt sustained release matrix tablet of theophylline prepared using eudragit RS PO and eudragit RL PO as meltable and sustained release polymer; in 11th International symposium of controlled release society, Indian chapter held at Mumbai on 16th and 17th Feb, 2011.

➤ **Research Article Published:**

- S. P. Thakare, H. V. Deore, S. D. Patil, **S. R. Yende** and U. M. Upadhyay. Evaluation of hepatoprotective effect of *cocculus Hirsutus (l)* diols on ethanol induced hepatic damage in

- Albino wistar rats. Pharmacologyonline; 3; Sept - Dec 2010; 810-816.
 - **T. M. Rasala, V. V. Kale, M. R. Bhalekar, J. G. Avari.** Formulation and evaluation of mucoadhesive microcapsule Diltiazem HCl and Diclofenac sodium by orifice-ionic gelation method. International journal of pharmaceutics and cosmetology; 1(1); 2010; 1-8.
 - **T. M. Rasala, V. V. Kale, G. K. Lohiya, K. S. Moharir, A. M. Ittadwar, J. G. Avari.** Chemistry and pharmaceutical application of excipients derived from Tamarind. Asian Journal of Chemistry; 23(4); 2011; 1421-1423.
 - **S. R. Walde, T. M. Rasala, G. A. Gurunani, A. M. Ittadwar.** Marketed preparation: quality evaluation of delayed release Aspirin tablet. International Research Journal of Pharmacy; 2(4); 2011; 90-92.
 - **V. V. Kale, S. Gadekar, M. Patil.** Manipulation of Physical Functionality of Bulk Drug Powder: Agglomerate Size Approach. International Journal of Drug Development & Research; 3(2); April-June 2011.
 - **V. V. Kale, S. Gadekar, A. M. Ittadwar.** Particle Size Enlargement: Making and Understanding of the Behavior of Powder (Particle) System. Systematic Reviews in Pharmacy; 2(1); January-June 2011.
 - **P. Muthal, K. A. Amesar, R. K. Kandelwal, K. K. Chandak, S. B. Waikar and M. J. Umekar.** Wound healing activity of *Bougainvillea spectabilis* extract in rats. Indian Journal of Natural Product; 26(3); 2010; 20-22.
- **Seminar/Conference/Workshop/STT/SDP/ QIP Attended:**
- **G. K. Lohiya** attended IPC, 17-19 Dec. 2011, held at Manipal University, Manipal, Karnataka.
 - **S. R. Yende** attended two days state level seminar on 'Current trends in preclinical pharmacology', held at AISSMS college of Pharmacy, Pune on 11-12 Jan. 2011.
 - **S. R. Walde, G. A. Gurunani, S. P. Padmane and S. S. Yadav** attended a National seminar cum workshop on "Exploration of Medicinal plants herbal conference at UDPS Nagpur on 28th and 1st march 2011.
 - **D. P. Dharkar, A. H. Deshpande** attended International conference on chemistry for mankind at Nagpur, held on 9th to 11th Feb 2011.
 - **N. P. Sapkal** attended 11th International symposium of controlled release society, Indian chapter held at Mumbai on 16th and 17th Feb, 2011.

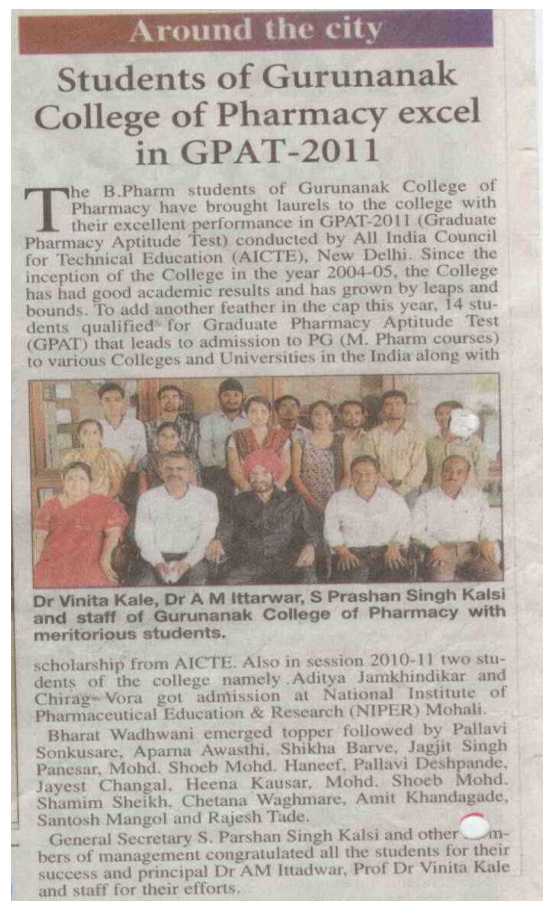
Winners of Annual Social Gathering *Zenith-2011*

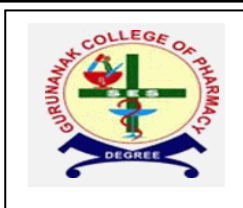
S. No.	Event	Winner/Runner up	Names
1.	Champions Trophy	Winner	B. Pharm final year.
2.	Personality contest	Mr. GNCP	Rohit Sinha (M. Ph. I, QA)
		Miss. GNCP	Heena Kausar (B. Ph. IV)
3.	Cricket (Men)	Winners (B. Ph. IV)	Pranay Thakre (Captain), Abhijit Dambhare, Dharmapal Waghmare, Ravindra Bonde, Abhjit Pawde, Jagjit Singh Panesar, Vishal Dharmari, Bharat Wadhwani, Girish Alaspure, Zishan Opai, Harshal Kumbhalkar.
		R. up (B. Ph. II)	Mitesh Patel (Captain), Dnyaneshwar Darode, Divyang Vora, Akshay Jha, Swapnil Nandkar, Tushar Gupta, Nitin Ramdham, Monish Bawankule, Narendra Kothari, Rishabh Lokhande, Dinesh Thote, Mangesh Thakare
		Man of the Match	Abhijit Dambhare (B. Ph. IV)
		Best Batsman	Mitesh Patel (B. Ph. II)
		Best Bowler	Pranay Thakre (B. Ph. IV)
4.	Cricket (Women)	Winner (B. Ph. II)	Amrita Bajaj, Tanvi Siriah, Pooja Grover, Tabassum Naaz, Anjali Singh, Supriya Mishra, Shruti Gaidhani, Bhavana Hirudkar, Deepali Saratkar, Rupali Kanhere, Bhavana Deshmukh.
		Runner	Varsha Kambale, Minal Bhagwat, Tanvi Manvatkar, Shweta

		(D. Ph. I)	Fulzele, PriyaYadav, Rena Sahani, Vaishnavi Fating, Ashwini Chandrikapure, priyanka Mohadikar, Pooja Yadav, Trupti Waghmare.
5.	Volleyball	Winner (B. Ph III)	Amit Singh(Captain), Rajnikant Shambhalkar, Saurabh Jaiswal, Rahul Jawarkar, Prashant Gahlod, Rahul Dugane, Pravin Khade, mangesh Raut, Vivek Mishra
		R. up (B. Ph. IV)	Abhijit Dambhare, Pranay Thakare, Prajwal pipare, Sushil Meshram, Vishal Dharmari, Krishanvadan patel, Naresh janjal, Bharat wadhwani, zishan opai.
		Best player	Amit Singh (B. Ph. III), Abhijit Dambhare (B. Ph. IV)
6.	Throw ball	Winner (B. Ph. III)	Anuja Meshram, Nitika Parihar Priya gupta, Akshara Jambhulkar, Shruti Humane, Samata Shambharkar, Kinjal Kanadiya, Deepali Bawane Sheetal Tathe
		R. up (B. Ph. II)	Tabassum Naaz, Tanvi Siriah, Anjali Singh, Amrita Bajaj, Pooja Grover, Supriya Mishra, Bhawana Hirudkar, Roocha Dhote, Deepali Saratakar
7.	Badminton (Men single)	Winner	Harshal Khakse (M. Ph.I QA)
		R. up	Piyush Atre (M. Ph.I QA)
8.	Badminton (women single)	Winner	Kumud Mendhe (M. Ph. I P'Chem)
		R. up	Pallavi Sonkusre (B. Ph.IV)
9.	Carom (Men single)	Winner	Tushar Raut (D. Ph. II)
		R. up	Anil Barve (M. Ph.II)
10.	Carom (Men double)	Winner	Akash Amrutkar, Pravin Tidke (B. Ph.III)
		R. up	Tushar Raut, Shailesh Nandagawali. (D. Ph. II)
11.	Carom (women double)	Winner	Reshma Gawate, Pragya Thamke (M. Ph. I P'Chem)
		R. up	Tabassum Naaz, Tanvi Siriah (B. Ph.II)
12.	Chess (Men)	Winner	Ajay Rode (D. Ph.II)
		R. up	Kushal Sahare (M. Ph.I P'Chem)
13.	Table tennis (Single)	Winner	Vikram Chabra (M. Ph. I QA)
		R. up	Anil Barve (M. Ph.II)
14.	Table Tennis (Double)	Winner	Vikram Chabra, Harshal Khakse
		R. up	Madhura Denge, Piyush Atre (M. Ph. I QA)
15.	Tug of War (Men)	Winner (B. Ph. IV)	Abhijit Dambhare, Abu Talha Ansari, Jagjit Singh Panesar, Mohd. Zishan Opai, Mukesh Shukla, Pranay Thakare, Manjul Gupta
		R. up (B. Ph.II)	Mangesh Thakare, Dinesh Thote, Asit Dahate, Divyang Vora, Swapnil Nandkar, Gyaneshwar Darode, Mitesh Patel
16.	Tug of War (women)	Winner (B. Ph. IV)	Heena Kausar, Pallavi Deshpande, Megha Mohadikar, Shikha Barve, Simmi Singh, Smita Meshram, Deepika Akre, Poonam Pande, Suchita Navghare, Sneha Surkar
		R. up (B. Ph.)	Tabassum Naaz, Anjali Singh, Amrita Bajaj, Pooja Grover, Tanvi Siriah, Supriya Mishra, Bhawana Hirudkar, Rupali Kanhere, Deepali Saratakar, Shruti Gaidhani.
17.	Treasure hunt (Person)	Winner	Tabassum Naaz, Pooja Grover, Tanvi Siriah (B. Ph .II)
18.	Treasure hunt (object)	Winner	Sushil Kewalramani, Tanveer Raza, Zain Hudani (B. Ph .II)
19.	Quiz competition	Winner	Sachin Namewar, Mohd. Akhtar Quereshi, Tejas Chaudhari. (M. Ph. I QA)
		R. up	Bishwajit Panda, Abhinav Raut, Abhishekh Chawardol. (M. Ph.II)
20.	Rangoli	Winner	Samta Shambharkar (B. Ph. III)
		R. up	Vaishnavi Fating (D. Ph. I), poonam Pandey (B. Ph. IV)

21.	Mehandi	Winner	Rumana shekh (D. Ph. II)
		1 st R. up	Sweta Fulzele (D. Ph.I)
		2 nd R. Up	Samata Shambharkar (B. Ph III)
22.	Debate	Winner	Vishal Dharmari (B. Ph. IV)
		R. up	Tejas Choudhari (M. Ph. I QA)
23.	Drama (Skit)	Winner	B. Pharm III rd year
		R. up	D. Pharm. II nd Year
24.	Dance (single)	Winner	Anuja Kulkarni (B. Ph. IV)
		R. up	Shobita Jain (M. Ph. I P'ceutics), Pallavi Deshpande (B. Ph IV)
25.	Dance (Group)	Winner	B. Pharm III year team
26.	Antakshari	Winner (M. Ph. II)	Monika Mohod, Vinit Agnihotri
		R. up (B. Ph. IV)	Sneha Surkar, Snehal Shrikundwar
27.	Elocution	Winner (M. Ph. I, QA)	Tejas Chaudhari
		R. up (M. Ph. I, QA)	Rohit Sinha
28.	Singing	Winner (B. Ph. IV)	Amit Patil
		R. up (B. Ph. IV)	Sweta Gaikwad
29.	Fun fare	Winner (B. Ph. IV)	Mrunal Guruwale
		R. up	Madhura Denge (M. Ph. I, QA), Sweta Fulzele (D. Ph. II)
		Consolation	Ashwin Fulmali, (B. Ph. IV)

News and Photo Gallery





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