RESEARCH ACTIVITIES
2.1 **EXCERPT FROM RESEARCH OFFICE-JSSCPO**

Research Progression Action and Attainment Plan & Monitoring (Stay Home Period)

With the sole intention to keep PhD scholars in research progressive track and with the notion that nothing could stop the research experience and aspirations at JSSCP, Ooty and JSS AHER, google survey forms has been formulated and circulated to collate the action plan for stay home period of research scholars and their attainment monitoring and monthly progression.

**Timeline of activities**

25\textsuperscript{th} March 2020: Research progression action plan survey initiated

30\textsuperscript{th} March 2020: Self-guided goal setting and action plan documented

20\textsuperscript{th} April 2020: Goal attainment and rescoping targets survey initiated

30\textsuperscript{th} April 2020: Goals attained documented

April- till month: Monthly research progression monitored and documented

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**Research Progression Action and Attainment (Stay Home Period: Survey)**

Dear Scholars,

The sole intention of this exercise is to keep you in research progressive track with the notion that nothing could stop the research experience and aspirations at JSSCP, Ooty and JSS AHER.

- **Email address**: 
- **Valid email address**: This form is collecting email addresses. Change settings

**Are you safe and healthy?**

- Yes
- No

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**Monthly Research Progression Report**

Dear Research Scholars,

Hope you are doing well. Please note that all research scholars are mandated to submit monthly wise research progress report, from April onwards. Please complete one form for one month only. This is for the record of your progress.

Please be responsible for your claims of progressions and achievements. This will be crosschecked with respective guides and HOD. Also, the fellowship holders are instructed to submit the compliant form along with their fellowship application. This applies for the fellowship claim applications submitted recently (for the months of April and May).

Please adhere to the following deadlines:

- Report submission for the months of April, May, June: 15th July 2020
- Report submission for July onwards: 5th of following month

Thank you for your prompt action and responsible responses.
Following are the key outcomes of your responses generated.

- First thing first, I am very glad to share from the response gathered that all of our scholars are safe and healthy. Great. Please continue to stay safe and healthy.
- Your research progressive goals that you intended to achieve by April 15\textsuperscript{th} has been recorded. The following is the summary of responses collected.

\begin{image}
\includegraphics[width=\textwidth]{chart.png}
\caption{Chart of responses}
\end{image}

**Survey 2 (April 2020)**

- 90 responses (~85% response rate) were received
- **61 Scopus/impact factor manuscripts (68\% attainment of agreed goals) have been submitted between 25\textsuperscript{th} March to 21\textsuperscript{st} April 2020**
- 68\% of the scholars achieved their goals and the remaining ensured that they are working towards achieving the same no later than 30\textsuperscript{th} April 2020.
- The challenges for not achieving found to be mixed, but handful of scholars (40\% of total strength) joined recently (3 to 8 months) and in the process of their literature collection, conceptualization and gaining knowledge of scientific writing.

**Survey 3 (Monthly Progression Report; April onwards till month)**

All ongoing scholar’s (Full time and Part time) progression was monitored with monthly-progression report. These reports were cross verified by respective Guides, HODs, Research Director and Principal periodically. All fellowship holders were instructed to submit the fellowship application claims along with the month-wise progression report in the Google survey and the report consented with guide and HOD before submission for processing.

With the notion that - ‘Learning Never Stops at JSS’, the research scholars and the faculty members of JSSCPO took initiatives to utilize the lockdown period more productively and to
publish their research or review work in peer reviewed and indexed journals. The research outcomes between March 25th to 30th June 2020 are summarized in the following table.

### SUMMARY OF RESEARCH ACTIVITIES FROM MARCH 25TH TO JUNE 30TH 2020

<table>
<thead>
<tr>
<th>Total number of papers published</th>
<th>Total number of papers submitted</th>
<th>Patent filed</th>
<th>Projects Sanctioned</th>
<th>Projects Applied</th>
<th>PhD viva completed (through online mode)</th>
<th>Consultancy work</th>
</tr>
</thead>
<tbody>
<tr>
<td>58</td>
<td>107</td>
<td>01*</td>
<td>03</td>
<td>12</td>
<td>07</td>
<td>3.132 L</td>
</tr>
</tbody>
</table>

* Tissue engineered acellular scaffold for the treatment of diabetic wounds, App. No. 202041027368, Inventors: Dr. Karri V V S Narayana Reddy, Mr. Bharat Kumar Reddy Sanapalli, Ms. Rishita Tyagi, Dr. Gowthamarajan Kuppusamy, Dr. Praveen Thaggikuppe Krishnamurthy and Dr. Ashish Devidas Wadhwani. Filed on: 27.06.2020

### 2.2 PUBLICATIONS

The publications made by the faculty and research scholars of JSSCPO include journals, book chapters, conference proceedings. The summary of the publications made with respect to their discipline and COVID-19 pandemic are summarized below.

- Total Number of Papers Published: 58
- Papers Pertaining to Covid-19: 07
- Book Chapters Published: 02
- Conference Proceedings (Abstract): 03

### TOTAL NUMBER OF PAPERS PUBLISHED IN PEER REVIEWED AND INDEXED JOURNALS (TOTAL: 58)

- Pharmaceutical Analysis, 11
- Pharmaceutical Biotechnology, 6
- Pharmaceutical Chemistry, 13
- Pharmaceutics, 9
- Pharmacognosy, 3
- Pharmacology, 10
- Pharmacy Practice, 6
TOTAL NUMBER OF PAPERS PUBLISHED IN SCOPUS Indexed Journals (Total: 53)

- Pharmacy Practice, 4
- Pharmaceutical Analysis, 11
- Pharmaceutical Biotechnology, 6
- Pharmaceutical Chemistry, 12
- Pharmacognosy, 3
- Pharmaceutics, 9
- Pharmacology, 8
- Pharmaceutical Analysis, 7
- Pharmaceutical Biotechnology, 3
- Pharmaceutical Chemistry, 4
- Pharmacognosy, 1
- Pharmaceutics, 7
- Pharmacology, 5

PUBLICATIONS MADE DURING THE LOCKDOWN PERIOD (March 25th to May 5th, 2020)
- Publications made: 32
A total of 107 papers have been submitted by faculty and research scholars of our institution during the period of April to June 2020. The month wise publications numbers submitted are shown below.

**Number of Publications Communicated during April – June = 107**
2.3 PROJECTS SANCTIONED / SUBMITTED

The details of the projects and seminar grants sanctioned or submitted by the faculty are detailed as below.

- **Ongoing Projects**: Rs. 516.22 L (31 Projects)
- **Projects Sanctioned (March 2020- June 2020)**: Rs 78.68 L (3 Projects)
- **Projects submitted**: Rs. 194.63 L (12 Projects)
- **Seminar Grants received**: Rs 1.24 L (02 seminars)
- **PhD public viva voce presentations (online)**: 07
- **Synopsis presentations (online)**: 01

DEPARTMENT OF PHARMACEUTICAL ANALYSIS

**Project grant Sanctioned : 02, Seminar grant sanctioned : 01**

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Title</th>
<th>Agency applied for</th>
<th>Period</th>
<th>Grant Amount</th>
<th>Sanctioned by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Pre-Satellite Workshop and Two Days National Conference on&quot; Genotoxic Impurities in Essential Medicines – Impact on Public Health &amp; Current Regulatory Challenges&quot;</td>
<td>AICTE, New Delhi</td>
<td>2020</td>
<td>0.49 L (Seminar Grant)</td>
<td>Dr. M. R. Jeyaprakash</td>
</tr>
<tr>
<td>2.</td>
<td>Nutrigenetic Assessment of Iron: An Essential Micronutrient isolated from fortified and biofortified Indian Based wheat Cultivars</td>
<td>ICMR, New Delhi</td>
<td>2020 - 2023</td>
<td>32.60 L</td>
<td>Dr. N. Krishna Veni (PI)/Dr. Praveen T K (Co PI)</td>
</tr>
<tr>
<td>3.</td>
<td>A stability-indicating LC-MS/MS method for anti-cancer drugs through quality by design approach: Identification, characterization and genotoxicity evaluation of degradation products</td>
<td>ICMR, New Delhi</td>
<td>2020 - 2023</td>
<td>21.0 L</td>
<td>Dr. B. Babu (PI)/ Dr. S. N. Meyyanathan (Co-PI)</td>
</tr>
</tbody>
</table>

**Project Grant Submitted: 02**

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Project Title</th>
<th>Funding Agency</th>
<th>Month &amp; Year of submission</th>
<th>Grant Amount (in lakhs)</th>
<th>PI &amp; Co-PI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
### DEPARTMENT OF PHARMACEUTICAL BIOTECHNOLOGY

**Project Grant Sanctioned : 01**

<table>
<thead>
<tr>
<th>Sl no.</th>
<th>Title</th>
<th>Agency applied for</th>
<th>Period</th>
<th>Grant Amount</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Therapeutic efficacy of selected probiotics and expression/suppression of proteins in triple negative breast cancer cells – A role of probiotics in cancer therapy</td>
<td>ICMR, New Delhi</td>
<td>2020-2023</td>
<td>25.08</td>
<td>Dr. Ashish Wadhwani</td>
</tr>
</tbody>
</table>

### DEPARTMENT OF PHARMACEUTICAL CHEMISTRY

**Project Grant Submitted: 05**

<table>
<thead>
<tr>
<th>Sl no.</th>
<th>Title</th>
<th>Agency applied for</th>
<th>Period</th>
<th>Grant Amount</th>
<th>Submitted by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Activity of Phytochemical constituents of some medicinally important Natural products and Drugs repurposing against various SARS-CoV-2 (COVID19) targets by Computational approach.</td>
<td>Tamilnadu State Council For Science And Technology</td>
<td>18 months</td>
<td>Rs. 5 lakhs</td>
<td>Dr. R. Kalirajan</td>
</tr>
<tr>
<td>Sl no.</td>
<td>Title</td>
<td>Agency applied for</td>
<td>Period</td>
<td>Grant Amount</td>
<td>Submitted by</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------</td>
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<td>---------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Effect Of Polyherbal Formulation Containing Plant Immunomodulators On The Molecular Pathway Of Covid-19: An In-Silico Approached Based Study</td>
<td>AYUSH-Modified EMR Covid-19 Scheme</td>
<td>Applied on 01-05-2020 (One Year)</td>
<td>8.0 L Lakhs</td>
<td>Dr. N. Jawahar</td>
</tr>
<tr>
<td>2.</td>
<td>Combination of prophylactic drug and flavonoid conjugate in Menthol based Nanoemulsion installed in metered dose inhalers for the management of Covid19</td>
<td>Covid-19 BIRAC-DBT</td>
<td>May-June 2020</td>
<td>20.10 L</td>
<td>Dr. R Suresh Kumar</td>
</tr>
<tr>
<td>3.</td>
<td>“A strategic combination of prophylactic drug and flavonoid conjugate in ICMR</td>
<td>May-June 2020</td>
<td>20.28 L</td>
<td></td>
<td>Dr. R Suresh Kumar</td>
</tr>
</tbody>
</table>
Menthol based Nanoemulsion polymer adhesive strip for facial masks in the management of covid19

Development of nano structured itraconazole ophthalmic Gel: risk assessment, quality by design (QBD) based optimization for management of diabetic retinopathy

4. Development of nano structured itraconazole ophthalmic Gel: risk assessment, quality by design (QBD) based optimization for management of diabetic retinopathy

DBT - BIRAC
May-June 2020
40.0L
Dr. K.Gowthamarajan

DEPARTMENT OF PHARMACOLOGY

Seminar Grant sanctioned : 01

<table>
<thead>
<tr>
<th>Sl no.</th>
<th>Title</th>
<th>Agency applied for</th>
<th>Period</th>
<th>Grant Amount</th>
<th>Submitted by</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>2 days seminar on Applications of 3Rs and Alternatives to Animal Testing, during Jul 3 &amp; 4, 2020</td>
<td>DBT New Delhi, (DBT/CTEP/01/20191251073)</td>
<td>01 year</td>
<td>0.75 Lakhs</td>
<td>Dr. Praveen TK</td>
</tr>
</tbody>
</table>

DEPARTMENT OF PHARMACY PRACTICE

Project Grant Submitted: 01

<table>
<thead>
<tr>
<th>Sl no.</th>
<th>Title</th>
<th>Agency applied for</th>
<th>Period</th>
<th>Grant Amount</th>
<th>Submitted by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Capacity Building for Menstrual Hygiene Management An SDG Indicator of UN among Adolescent School Girls including Tribes at Nilgiris District</td>
<td>DST-NCSTC</td>
<td>Two Years (Jan 2021-Dec 2022)</td>
<td>14 L</td>
<td>Dr. M.Deepalakshmi</td>
</tr>
</tbody>
</table>

2.4 CONSULTANCY WORK

The details of the consultancy work carried out by the departments with principal investigator are detailed as below.
### Department of Pharmaceutical biotechnology

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Title</th>
<th>Agency</th>
<th>Period</th>
<th>Principal Investigator or Co-PI</th>
<th>Grant/Amount in (Rs Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Antiviral activity of Bhasma Nano formulation</td>
<td>Dhanvantari Nano Ayushadi, Chennai</td>
<td>March to April 2020</td>
<td>Dr Ashish Wadhwani</td>
<td>0.236 Lakhs</td>
</tr>
<tr>
<td>2</td>
<td>Antiviral activity of Bhasma Nano formulation – two additional concentrations</td>
<td>Dhanvantari Nano Ayushadi, Chennai</td>
<td>May 2020</td>
<td>Dr Ashish Wadhwani</td>
<td>0.10 lakhs</td>
</tr>
<tr>
<td>3</td>
<td>Antiviral activity of liquid nano formulation</td>
<td>Dhanvantari Nano Ayushadi, Chennai</td>
<td>June 2020</td>
<td>Dr Ashish Wadhwani</td>
<td>0.236 Lakhs</td>
</tr>
</tbody>
</table>

### Department of Pharmacology

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Title</th>
<th>Agency</th>
<th>Period</th>
<th>Principal Investigator or Co-PI</th>
<th>Grant/Amount in (Rs Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Acute Oral Toxicity &amp; Nephroprotective activity</td>
<td>M/s Heavenley fuel, Chennai</td>
<td>March to May 2020</td>
<td>Dr Praveen T K</td>
<td>0.45 Lakhs</td>
</tr>
<tr>
<td>2</td>
<td>Acute Oral Toxicity &amp; Preclinical study</td>
<td>M/s Tablets India Pvt. Ltd, Chennai</td>
<td>March to May 2020</td>
<td>Dr Praveen T K</td>
<td>1.87 Lakhs</td>
</tr>
<tr>
<td>3</td>
<td>Acute Oral Toxicity</td>
<td>M/s Heavenley fuel, Chennai</td>
<td>March to May 2020</td>
<td>Dr Praveen T K</td>
<td>0.24 Lakhs</td>
</tr>
</tbody>
</table>

### 2.5 PhD Public Viva Voce Examination/Synopsis Presentation by online mode

As per the advisory note of JSSAHER (Ref: COE/POL/PHA/2020-21/030 dated 20.04.2020) the public viva voce examinations of the PhD scholars were successfully completed by online mode. The efforts of JSSAHER towards completing the PhD examinations were well appreciated by the examiners and participants. This online examination also have given the opportunity for the appointment of external examiners from across the country and from abroad which otherwise would have been a limitation. Thus, the research scholars could able to showcase their research outcomes at both national and international platforms. From the unlock period, the following PhD scholars took the PhD public viva voce examinations and synopsis presentation by online mode.

#### Ph. D Public Viva voce examinations conducted by Online Mode

<table>
<thead>
<tr>
<th>Sl.N o.</th>
<th>Name of the Candidate</th>
<th>Category</th>
<th>Guide</th>
<th>Department</th>
<th>Date of submission</th>
</tr>
</thead>
</table>

### Synopsis presentation by online mode

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Name of the Candidate</th>
<th>Category</th>
<th>Guide</th>
<th>Department</th>
<th>Date of submission</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ms Mohsina Hyder</td>
<td>FT</td>
<td>Dr S Ponnusankar</td>
<td>Pharmacy Practice</td>
<td>25.06.2020</td>
</tr>
</tbody>
</table>

**GLIMPSES OF PhD VIVA EVALUATION BY ONLINE MODE**

Scholar: Ms. Roopa BS; Date: 29.05.2020