

# CH3F9-15 Molecular Pharmacology

**26/27**

**Department**

Chemistry

**Level**

Undergraduate Level 3

**Module leader**

Lona Alkhalaf

**Credit value**

15

**Module duration**

10 weeks

**Assessment**

100% coursework

**Study location**

University of Warwick main campus, Coventry

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## Description

### Introductory description

N/A

[Module web page](#)

### Module aims

The aim of the module is to describe current developments, methods and techniques in drug design and drug discovery in the pharmaceutical industry. The module is given by representatives of major pharmaceutical companies, who present case studies and techniques in modern drug discovery and drug development. The module also aims to develop transferable skills. This module is assessed by 100% assessed work via team presentation of an assigned topic in medicinal chemistry, an oral presentation, and an individual written assignment.

### Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Lectures will be presented by senior scientists from the pharmaceutical industry. Each visiting

lecturer will present 1-2 lectures describing case studies in modern drug design and drug discovery. The precise content lectures will vary according to the areas of research & development of the visiting lecturers. Current lecturers and syllabus as follows: Dr. Peter North (GSK) Discovery of sumatriptan for treatment of migraine.

Dr. David Fox (Functional Therapeutics). Discovery of chemokine receptor antagonists

Dr. Leo Bowsher (UCB Pharma) Therapeutic applications of antibodies.

Dr. John Pollard (Vertex) Enzyme inhibition, inhibitors of protein kinases.

Dr. Andrew Merritt (LifeArc) Combinatorial chemistry & high-throughput screening.

Dr. Rhian Holvey (Astex) Fragment based drug discovery

## Learning outcomes

By the end of the module, students should be able to:

- Describe and present current advances in drug design, drug discovery and drug development.
- Work effectively in a team in order to research and present a report in the area of current drug discovery.
- Make an effective written presentation on a topic in current drug discovery.
- Make an effective oral presentation on a topic in current drug discovery.

## Indicative reading list

[Reading lists can be found in Talis](#)

## Research element

e.g. essay, dissertation, individual or group research, research skills activity, etc.

## Interdisciplinary

e.g. co taught with another department or with an industry perspective, bridges two or more disciplinary concepts, ideas, etc.

## Subject specific skills

Written communication

Teamwork

Information literacy and research skills

## Transferable skills

Written communication

Teamwork

Information literacy and research skills

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# Study

## Study time

Type	Required
Lectures	12 sessions of 1 hour (8%)
Other activity	18 hours (12%)
Private study	120 hours (80%)
Total	150 hours

## Private study description

60 hr student self-study for group project

60 hr student self-study for individual assignment

## Other activity description

3 hr oral presentation session

15 hr student group meetings for group project

## Costs

No further costs have been identified for this module.

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## Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

## Assessment group A3

Assessment component	Weighting	Study time	Eligible for self-certification
Team-based assignment (12500 words)	40%		No

Reassessment component is the same

	<b>Weighting</b>	<b>Study time</b>	<b>Eligible for self-certification</b>
<b>Assessment component</b>			
Individual Lecture Summary (3000 words)	40%		Yes (extension)
Reassessment component is the same			
<b>Assessment component</b>			
Group Project Oral Presentation	16%		No
Reassessment component is the same			
<b>Assessment component</b>			
Team Assignment - Group Management Report	4%		No
Reassessment component is the same			

## Feedback on assessment

Individual assignment, group project written report and oral presentation are double-marked by two members of academic staff, written feedback within 20 days.

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## Availability

### Pre-requisites

To take this module, you must have passed:

- All of
  - [CH271-15 Mechanistic and Biological Chemistry](#)

## Courses

This module is Core for:

- Year 4 of UCHA-4 Undergraduate Chemistry (with Intercalated Year) Variants
- UCHA-3 Undergraduate Chemistry 3 Year Variants
  - Year 3 of F121 Chemistry with Medicinal Chemistry
  - Year 3 of F121 Chemistry with Medicinal Chemistry
  - Year 3 of F121 Chemistry with Medicinal Chemistry
- Year 3 of UCHA-F109 Undergraduate Master of Chemistry (with International Placement)
- Year 3 of UCHA-4M Undergraduate Master of Chemistry Variants
- Year 4 of UCHA-F127 Undergraduate Master of Chemistry with Medicinal Chemistry (with Intercalated Year)