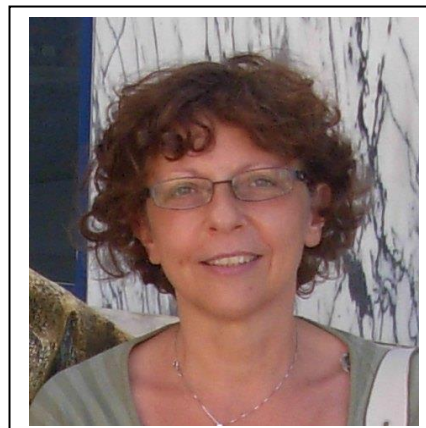




DIPARTIMENTO DI CHIMICA E TECNOLOGIE DEL FARMACO
CURRICULUM DIDATTICO-SCIENTIFICO DEL PROF. M. ANTONIETTA CASADEI

DATI PERSONALI

Nome e Cognome	M. ANTONIETTA CASADEI
<i>Luogo e data di nascita:</i>	xxxxx
<i>Stato Civile:</i>	xxxxx
Dipartimento	Chimica e Tecnologie del Farmaco
Indirizzo	Piazzale Aldo Moro 5 – 00185 Roma
Telefono uff./lab./mobile	06-49913584/06-49913823
Fax	06-49913133
E-mail	mariaantonieta.casadei@uniroma1.it



Settore Scientifico-Disciplinare: CHIM/09 Tecnologico Farmaceutico Applicativo
Orario di Ricevimento: martedì ore 10-12

ATTUALE POSIZIONE

➤ Professore associato CHIM/09

CARRIERA E TITOLI

1980 Laurea in Chimica, Università degli Studi di Roma, votazione 110/110 e lode
 1981-82 Incarico annuale per d'insegnamento di chimica presso l'istituto Professionale Virginia Wolf di Roma
 1982-86 Assegnista CNR, Istituto di Chimica Farmaceutica Università degli Studi di Roma
 1986-87 Vincitore di una borsa di studio CNR-NATO per l'estero presso il Dipartimento di Chimica dell'Università di Southampton (G.B.)
 1988-98 Ricercatore universitario gruppo di discipline n.95 (Chimica Farmaceutica Applicata) della Facoltà di Farmacia, Università degli Studi di Roma
 1998 Vincitore del concorso a posti di professore associato per il settore scientifico disciplinare C08X, attuale CHIM/09 (Farmaceutico Tecnologico Applicativo).

ATTIVITA' DIDATTICA

- 1) Chimica Farmaceutica Applicata (CTF, 4° anno)
- 2) Veicolazione e Direzione dei Farmaci (opzionale CTF, 4° anno)
- 3) Nutrizione parenterale I (Scuola di Specializzazione Farmacia Ospedaliera)

ATTIVITA' SCIENTIFICA

Dopo la tesi in chimica organica, l'attività di ricerca ha riguardato per oltre 15 anni l'applicazione delle metodologie elettrochimiche alla sintesi di molecole biologicamente attive. L'attività di ricerca è indirizzata attualmente verso differenti aspetti del rilascio modificato (sostenuto e/o modulato o sito specifico) del farmaco. In particolare si stanno studiando nuovi materiali polimerici



da impiegare come “scaffold” nell’ingegneria tissutale e/o come sistemi per il rilascio modificato di farmaci. I polimeri utilizzati sono derivati di polisaccaridi e poli-aminoacidi, funzionalizzati in modo da renderli idonei alla formazione di strutture tridimensionali (hydrogels) sia per interazioni elettrostatiche che per formazione di legami chimici tra le catene. L’attuale ricerca è indirizzata anche verso la preparazione di micro- e nano-particelle a base polimerica e lipidica per la protezione e veicolazione di molecole bioattive naturali da utilizzare in campo cosmetico ed alimentare. Ulteriori campi di ricerca sono volti alla progettazione e sviluppo di liposomi aventi il compartimento acquoso gelificato e di nano-sistemi ibridi costituiti da nano-particelle magnetiche e liposomi per il rilascio *on-demand* di farmaci.

PUBBLICAZIONI SCIENTIFICHE

- | | | |
|----------|---|--------------------------------------|
| 1 | Di Sotto A, Paolicelli P, Nardoni M, Abete L, Garzoli S, Di Giacomo S, Mazzanti G, Casadei MA, Petralito S
SPC liposomes as possible delivery systems for improving bioavailability of the natural sesquiterpene beta-caryophyllene: lamellarity and drug loading as key features for a rational drug delivery design
<i>Pharmaceutics</i> , 2018, 10:274 | Impact
Factor

3.746 |
| 2 | Adrover A, Varani G, Paolicelli P, Petralito S, Di Muzio L, Casadei MA, Tho I
Experimental and modeling study of drug release from HPMC-based erodible oral thin films
<i>Pharmaceutics</i> , 2018, 10:222 | 3.746 |
| 3 | Nardoni M, Della Valle E, Liberti M, Relucenti M, Casadei MA, Paolicelli P, Apollonio F, Petralito S
Can pulsed electromagnetic fields trigger on-demand drug release from high-tm magnetoliposomes?
<i>Nanomaterials</i> , 2018, 8:196 | 3.504 |
| 4 | Paolicelli P, Petralito S, Varani G, Nardoni M, Pacelli S, Di Muzio L, Tirillò J, Bartuli C, Cesa S, Casadei MA, Adrover A
Effect of glycerol on the physical and mechanical properties of thin gellan gum films for oral drug delivery
<i>International Journal of Pharmaceutics</i> , 2018, 547, 226-234 | 3.862 |
| 5 | Masci A, Carradori S, Casadei MA, Paolicelli P, Petralito P, Ragno R, Cesa S
Lycium barbarum polysaccharides extraction, purificatio, structural characterization and evidence about hypoglycemic and hypolipidaemic effects. A review
<i>Food Chemistry</i> , 2018, 254: 377-389 | 4.946 |
| 6 | Pacelli S, Paolicelli P, Avitabile M, Varani G, Di Muzio, Cesa S, Tirillò J, Bartuli C, Nardoni M, Petralito P, Adrover A, Casadei MA
Design of a tunable nanocomposite double network hydrogel based on gellan gum for drug delivery applications
<i>European Polymer Journal</i> , 2018, 104: 184-193 | 3.531 |
| 7 | Paolicelli P, Varani G, Pacelli S, Ogliani E, Nardoni M, Petralito S, Adrover A, Casadei MA
Design and characterization of a biocompatible physical hydrogel based on scleroglucan for topical drug delivery
<i>Carbohydrate Polymers</i> , 2017, 174: 960-969 | 5.158 |
| 8 | Cesa S, Carradori S, Bellagamba G, Locatelli M, Casadei MA, Masci A, Paolicelli P | |



- Evaluation of processing effects on anthocyanin content and colour modifications of blueberry (*Vaccinium* spp) extracts. Comparison between HPLC-DAD and CIELAB analyses **4.946**
Food Chemistry, 2017, 232: 114-123
- 9 Adrover A, Casadei MA, Paolicelli P, Petralito S, Varani G
Swelling and drug release from oral thin films (OTFs)
AIP Conference Proceeding, 2016, 1736
- 10 Krasodomska O, Paolicelli P, Cesa S, Casadei MA, Jungnickel
Protection and viability of fruits seed oils by nanostructured lipid carrier (NLC) nanosuspensions **5.091**
Journal of Colloids and Interface Science, 2016, 479: 25-33
- 11 Petralito S, Paolicelli P, Nardoni M, Apollonio F, Liberti M, Merla C, Pinto R, Casadei MA, Annesini MC
Magnetoliposomes envisioning new strategies for water decontamination
Chemical Engineering Transactions, 2016, 47: 37-42 **0.82**
- 12 Alhaique F, Casadei MA, Cencetti C, Coviello T, Di Meo C, Matricardi P, Pacelli S, Paolicelli P
From macro to nano polysaccharide hydrogels: an opportunity for the delivery of drugs
J. Drug Delivery Science and Technology, 2016, 32: 88-99 **2.297**
- 13 Pacelli S, Paolicelli P, Moretti G, Petralito S, Di Giacomo S, Vitalone A, Casadei MA
Gellan gum methacrylate and laponite as an innovative nanocomposite hydrogel for biomedical applications **3.531**
European Polymer Journal, 2016, 77: 114-123
- 14 Cesa S, Casadei MA, Cerreto F, Paolicelli P
Infant milk formulas effect of storage conditions on the stability of powdered products towards autoxidation
Foods, 2015, 4: 487-500
- 15 Pacelli S, Paolicelli P, Casadei MA
New biodegradable dextran-based hydrogels for protein delivery. Synthesis and characterization **5.158**
Carbohydrate Polymers, 2015, 126: 208-214
- 16 Pacelli S, Paolicelli P, Dressen I, Kobayashi S, Vitalone A, Casadei MA
Injectable and photocross-linkable gels based on gellan gum methacrylate: a new tool for biomedical applications
International J. Biological Macromolecules, 2015, 72: 1335-1342
- 17 Pacelli S, Paolicelli P, Pei F, Tita B, Vitalone A, Casadei MA
Gellan gum and polyethylene glycol dimethacrylate double network hydrogels with improved mechanical properties **1.434**
Journal of Polymer Research, 2014, 21: 1-13
- 18 Petralito S, Spera R, Pacelli S, Relucenti, Familiari G, Vitalone A, Paolicelli P, Casadei MA
Design and development of PEG-DMA gel-in-liposomes as a new tool for drug delivery **2.975**
Reactive and Functional Polymers, 2014, 77: 30-38
- 19 Casadei MA, Cesa S, Pacelli S, Paolicelli P, Tita B, Vitali F
Dextran-based hydrogel microspheres obtained in w/o emulsion preparation:



	Characterization and in-vivo studies	
	<i>Journal of Microencapsulation</i> , 2014, 31: 440-447	1.793
20	Lopez Cebral R, Martin-Pastor M, Paolicelli P, Sejio B, Casadei MA, Sanchez A Application of NMR spectroscopy in the development of a biomimetic approach for hydrophobic drug association with physical hydrogels	
	<i>Colloids and Surfaces B: Biointerfaces</i> , 2014, 115: 391-399	3.997
21	Lopez Cebral R, Paolicelli P, Romeno-Camano V, Sejio B, Casadei MA, Sanchez A Spermidine cross-linked hydrogels as novel potential platforms for pharmaceutical applications	
	<i>Journal of Pharmaceutical Sciences</i> , 2013, 102: 2632-2643	3.075
22	Cerreto A, Corrente F, Botta B, Pacelli S, Paolicelli P, Mannina L, Casadei MA NMR investigation of carboxymethyl scleroglucan	
	<i>International Journal of Polymer Analysis and Characterization</i> , 2013, 14:587-595	1.333
23	Cerreto F, Paolicelli P, Cesa S, Abu Amara HM, D'Auria FD, Simonetti G, Casadei MA Solid lipid nanoparticles as effective reservoir systems for long-term preservation of multidose formulations	
	<i>AAPS Pharmaceutical Science and Technology</i> , 2013, 14: 847-853	2.451
24	Corrente F, Abu Amara HM, Pacelli S, Paolicelli P, Casadei MA Novel injectable and in situ cross-linkable hydrogels of dextran methacrylate and scleroglucan derivatives. Preparation and characterization	
	<i>Carbohydrate Polymers</i> , 2013, 92: 1033-1039	5.158
25	Cesa S, Casadei MA, Cerreto F, Paolicelli P Influence of fact extraction on the peroxide value of infant formulas	
	<i>Food Research International</i> , 2012, 48: 584-591	3.52
26	Corrente F, Paolicelli P, Matricardi P, Tita B, Vitali F, Casadei MA Novel pH-sensitive physical hydrogels of carboxymethyl scleroglucan	
	<i>Journal of Pharmaceutical Science</i> , 2012, 101: 256-267	
27	Cacchi S, Casadei MA, Di Giulio A, Fabrizi G, Forte G, Petrucci F, Goggiamani A, Moreno S, Paolicelli P, Prastaro A Suzuki-Miyaura cross-coupling of arendiazonium salts catalyzed by alginate/gellan stabilized palladium nanoparticles under aerobic conditions in water	
	<i>Green Chemistry</i> , 2012, 14: 317-320	8.596
28	Cerreto F, Scalzo M, Cesa S, Paolicelli P, Casadei MA Solid lipid nanoparticles based on low melting lipids as protective system of retinyl palmitate	
	<i>J. Drug Delivery Science and Technology</i> , 2011, 21:479-483	2.297
29	Lopez Cebral R, Sejio B, Sanchez A, Casadei MA, Paolicelli P Hydrogels prepared from natural anionic polymers	
	<i>PCT Int. Appl.</i> 2011, WO2011135150, A1 20111103	
30	Corrente F, Matricardi P, Paolicelli P, Tita B., Vitali F., Casadei M A Physical gels carboxymethyl scleroglucan/calcium ions as modified drug delivery system in topical formulations	3.098
	<i>Molecules</i> , 2009, 14: 2684-2698	
31	Paolicelli P, Cerreto F, Cesa S, Feenay M, Corrente F, Marianecchi C, Casadei M A Influence of the formulation components on the characteristics of the system SLN-dextran hydrogel employed for drug controlled release	1.793
	<i>J. Microencapsulation</i> , 2009, 26: 429-436	



- 32 Feenay M, Casadei M A, Matricardi P.
Carboxymethyl derivative of scleroglucan: a novel thermo-sensitive hydrogel forming polysaccharide for drug delivery applications **2.993**
J. Material Sci., 2009, 20: 1081-1087
- 33 Matricardi P, Pontoriero M, Coviello T, Casadei M A, Alhaique F.
In-situ crosslinkable novel alginate-dextran methacrylate IPN hydrogels for biomedical applications. Mechanical characterization and drug delivery properties **5.738**
Biomacromolecules, 2008, 9: 43-49
- 34 Giannuzzo M, Feenay M, Corrente F, Paoletti L, Paolicelli P, Tita B, Vitali F, Casadei M A.
pH-sensitive hydrogels of dextran: synthesis, characterization and in-vivo studies **3.408**
J. Drug Targeting, 2008, 16: 649-659
- 35 Casadei M A, Pitarresi G, Calabrese R, Paolicelli P, Giammona G.
Photocrosslinking of biodegradable and pH-sensitive dextran and polyaspartamide derivatives for colon-specific drug delivery **5.738**
Biomacromolecules, 2008, 9: 43-49
- 36 Pitarresi G, Casadei M A, Mandracchia D, Paolicelli P, Palombo F S, Giammona G.
Photocrosslinking of dextran and polyaspartamide derivatives: a combination suitable for colon-specific drug delivery **7.877**
J. Control. Rel., 2007, 119: 328-338
- 37 Casadei M A, Matricardi P, Fabrizi G, Feenay M, Paolicelli P.
Physical Gels of a Carboxymethyl Derivative of Scleroglucan : Synthesis and Characterization **4.491**
Eur. J. Pharm. Biopharm., 2007, 67: 682-689.
- 38 Casadei M A, Cerreto F, Cesa S, Giannuzzo M, Feenay M, Marianecchi C, Paolicelli P.
Solid Lipid Nanoparticles Incorporated in Dextran Hydrogels: a New Drug Delivery System for Oral Formulations **3.862**
Int. J. Pharm., 2006, 325: 140-146
- 39 Feenay M, Giannuzzo M, Paolicelli P, Casadei M A
Hydrogels of Dextran Containing Non Steroidal Anti-inflammatory Drugs as Pendant Agents **3.095**
Drug Delivery, 2007, 14: 87-93
- 40 Feroci M, Casadei M A, Orsini M, Palombi L, Inesi A.
Cyanomethyl Anion/Carbon Dioxide System; An Electrogenerated Carboxylating Reagent. Synthesis of Carbamates under Mild and Safe Conditions **4.805**
J. Org. Chem., 2003, 68: 1548-1551
- 41 Pitarresi G, Palombo F S, Giammona G, Casadei M A, Micheletti Moracci F.
Biodegradable Hydrogels Obtained by Photocrosslinking of Dextran and Polyaspartamide Derivatives **8.806**
Biomaterials, 2003; 24: 4301-4313