



CURRICULUM VITAE (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

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|---------|------------|
| CV date | 18/11/2021 |
|---------|------------|

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|--|---|---|------------|
| First name | ANA MARIA | | |
| Family name | ARDEVOL GRAU | | |
| Gender (*) | Female | Birth date (dd/mm/yyyy) | 05/02/1968 |
| Social Security, Passport, ID number | 78579471V | | |
| e-mail | anna.ardevol@urv.cat | http://www.bioactivity-food.recerca.urv.cat/en/about/anna-ardevol/ | |
| Open Researcher and Contributor ID (ORCID) (*) | 0000-0003-0156-7538 | | |

(*) Mandatory

A.1. Current position

| | | | |
|-------------------|---|----------------|--------------|
| Position | Full profesor (CU) | | |
| Initial date | 03/08/2019 | | |
| Institution | Universitat Rovira i Virgili | | |
| Department/Center | Dpto Bioquímica y Biotecnología | Fac. Química | |
| Country | Spain | Teleph. number | +34977559566 |
| Key words | Flavanoid, insect protein, gastrointestinal, enteroendocrine, food intake, TASR, ageing | | |

A.2. Previous positions (research activity interruptions, art. 14.2.b)): None

A.3. Education

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|--------------------------------|--------------------------------|------|
| PhD, Licensed, Graduate | University/Country | Year |
| PhD Ciencias Biológicas | Universitat Barcelona (SPAIN) | 1996 |
| Licenciado Ciencias Biológicas | Universitat Barcelona (SPAIN) | 1991 |

Part B. CV SUMMARY (max. 5000 characters, including spaces)

University Professor at the Rovira i Virgili University. I have more than 77 papers published in international journals indexed according to WoS in the last 10 years (number of average citations per article of 20.03), with an H-index of 25. My research has proved the effectiveness of proanthocyanidins, phenolic compounds widely distributed in nature (fruits, vegetables), protecting against some of the pathologies included in the Metabolic Syndrome. I defined for the first time the effects of proanthocyanidins against some disruptions of glucose homeostasis. Derived from it, we have moved to the role of some flavonoids on the endocrine function and lately to the enteroendocrine system. We have described its bioactivity on insulin and glucagon producing cells. We have identified their ability to modulate enteroendocrine cells protecting the pancreas against metabolic syndrome. We have described the ability of an extract rich in proanthocyanidins to limit food intake. Derived from this work we are now working with pure compounds to identify optimal combinations that, through their specific interaction with bitter taste receptors, can stimulate or inhibit food intake. Since we are

centred in the gastrointestinal tissue, the door used by the food to enter into our organism, I have initiated a complementary line of work to essay the bioactivity of insect protein on this tissue. We have proved their differential effect versus other common protein sources at enterohormone profile and their effects on food intake modulation. All these works have been mainly supported by the Spanish Government, through competitive funds from the Plan National. I have been the PI of four competitive research projects funded by MINECO. During this period, I have improved my abilities to transfer our research to the society by transferring it to enterprises (Co-author of 3 patents and one more submitted; URV delegate de la URV Xarxa de transferència tecnològica en alimentació (XIA) and PI of some non-competitive funds). All this work has been recognized by four consecutive six-year research periods (Sexenios; last one: 2010-2015). Among leadership on research, I have been the founder of our research team: [MoBioFood](#). During this period, I have been also the secretary of the Department of Biochemistry and Vice-rector of International Relations in the URV.

All our research has been usually published in high-quality international journals, but to reach society I have initiated our presence in social media (Facebook initially and now we are also in Instagram @MobiofoodURV). To reach young people we organize talks and sessions with high schools and primary schools; but also, we address to whole society with talks and seminars open to everybody. Fairs as Research Night is on our agenda yearly as well as the Day of the Women and girl on science. I am integrated into a specific program for it, called “100tífiques”, organized by FCRI.

I usually act as a referee for several international scientific journals. Yearly I participate in the evaluation of several project proposals, mainly at the Spanish government. At the international level, I maintain collaborations with different researchers that allows us to improve the quality of our research and to develop international Doctorates. I have supervised up to 5 doctoral theses, all of them labelled as European/International Doctoral Degree, during these 10 years. Two of them have been recognized by our university as “Premi extraordinari de doctorat”, and four of them are working as researchers in different labs. Now I have two running PhD students, although, one of them will complete her PhD at the beginning of 2022.

I want to highlight that all the research activity is complementary to my task as a full-time university teacher. Recognized with five teaching periods (Quinquenios docentes).

Part C. RELEVANT MERITS (*sorted by typology*)

C.1. Publications (*see instructions*)

1. Functional and genomic comparative study of the bitter taste receptor family TAS2R: insight into the role of human TAS2R5. Grau-Bové, C,... **Ardévol, A**, Pinent, M. FASEB JOURNAL. Accepted for publication (November 2021).
2. Modulation of Food Intake by Differential TAS2R Stimulation in Rat. Grau-Bové, C,... **Ardévol, A**, Pinent, M. NUTRIENTS. 2020; 12(12): 3784.
3. Glucagon-like peptide-1 regulation by food proteins and protein hydrolysates. Miguens-Gomez, A;...; **Ardévol, A**, Pinent, M. NUTRITION RESEARCH REVIEWS.2021.
4. Gastrointestinally Digested Protein from the Insect *Alphitobius diaperinus* Stimulates a Different Intestinal Secretome than Beef or Almond, Producing a Differential Response in Food Intake in Rats. Miguéns-Gómez, A, ..., **Ardévol A.** and Pinent, M. NUTRIENTS. 2020; 12(8): 2366.
5. Grape Seed Proanthocyanidins Target the Enteroendocrine System in Cafeteria-Diet-Fed Rats. Gines, I; ...; **Ardévol, A**. MOLECULAR NUTRITION & FOOD RESEARCH, 2018, 63; 11.
6. Strategy for limiting food intake using food components aimed at multiple targets in the gastrointestinal tract. Serrano, J; ...; **Ardevol, A**. TRENDS IN FOOD SCIENCE & TECHNOLOGY. 2017, 68. 113-129.
7. Effects of flavanols on the enteroendocrine system: Repercussions on food intake. Pinent, M; **Ardévol, A**. CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION. 2017; 57, 2, 326-334.

8. Defining Conditions for Optimal Inhibition of Food Intake in Rats by a Grape-Seed Derived Proanthocyanidin Extract. Serrano, J.; ..., **Ardévol, A.**, Pinent, M. NUTRIENTS. 2016; 8(10): 652.
9. Subchronic treatment with grape-seed phenolics inhibits ghrelin production despite a short-term stimulation of ghrelin secretion produced by bitter-sensing flavanols. Serrano, J; **Ardévol, A.** MOLECULAR NUTRITION & FOOD RESEARCH, 2016, 60, 12, 2554-2564.
10. Acutely administered grape-seed proanthocyanidin extract acts as a satiating agent. Serrano, J ... **Ardévol, A.** FOOD & FUNCTION, 2016, 7, 1, 483-490.

C.2. Congress

1. Oral presentation:
Anna Ardévol, Montserrat Pinent..... Effects of flavonols on the enteroendocrine system: proanthocyanidins effects on food intake. Eurofood 5th Euro-Global Summit and Expo on Food and Beverages. Spain. 2015
2. Invited presentation:
Anna Ardévol. Grape-seed proanthocyanidins modulate active glucagon-like peptide-1 (GLP-1) levels. BIOCAPS 2015 (& 1st Spanish National Symposium in Incretins). Spain. 2015
3. Oral presentation:
CASTELL-AUVÍ A,, **ARDÉVOL A**, PINENT M. GRAPE-SEED PROCYANIDIN EXTRACT PROTECTS GASTROINTESTINAL MUCOSA FROM OXIDATIVE STRESS. 8th World Congress on Polyphenols Appl. PORTUGAL. 2014

C.3. Research projects

1. Reference: Pending
Tittle: Combatre la inapetència associada a l'envelliment amb productes naturals.
Financing organisms: DIPTA-URV
IP: PINENT ARMENGOL, MONTSERRAT
Start-finish: 01/09/2021 - 31/3/2022. Amount granted: 13000 €
2. Reference: XIAVALTEC-2021-1-02
Tittle: BITTER-FI: Combatent la inapetència amb molècules naturals.
Financing organisms: XIA-FEDER
IP: PINENT ARMENGOL, MONTSERRAT
Start-finish: 01/06/2021 - 30/11/2021. Amount granted: 7.000 €
3. Reference: R2B2021-01
Tittle: BITTER-FI: Combatent la inapetència amb molècules naturals.
Financing organisms: FURV (Feder)
IP: **ARDÉVOL GRAU, ANA MARIA**
Start-finish: 01/05/2021 - 31/12/2021. Duration: 8 meses. Amount granted: 15.000 €
4. Reference: 2020MFP-COFUND-02-UE
Tittle: BITTER-FI: Ecnomotopic bitter taste receptors as targets for better health in the obesity or the ageing
Financing organisms: European Commission
IP: **ARDÉVOL GRAU, ANA MARIA/** PINENT ARMENGOL, MONTSERRAT
Start-finish: 28/02/2021 - 27/02/2025 Duration: 4 years. Amount granted: 22500 €
5. Reference: AGL2017-83477-R
Tittle: Efectos preventivos a largo plazo de componentes bioactivos de los alimentos en el tracto gastrointestinal frente a retos metabólicos sobre la homeóstasis: dieta obesogénica y envejecimiento
Financing organisms: Ministerio de Economía y Competitividad
IP: **ARDÉVOL GRAU, ANA MARIA**
Start-finish: 01/01/2018 - 31/12/2021 Duration: 4 years. Amount granted: 170.000 €
6. Reference: AGL2014-55347-R
Tittle: Bioactividad de los flavanoles en la pared gastrointestinal: efectos enteroendocrino e inmunoprotector para la prevención del Síndrome Metabólico.
Financing organisms: Ministerio de Economía y Competitividad
IP: **ARDÉVOL GRAU, ANA MARIA**

- Start-finish: 01/01/2015 - 30/06/2018. Duration: 3 years. Amount granted: 180.000 €
7. Title: Efectes saciants d'extractes rics en proantocianidines galades
Researcher, not IP
Financing organisms: Xarxa de Referència en Tecnologia dels Aliments de la Generalitat de Catalunya (XaRTA)
IP: Montserrat Pinent
Start-finish: 01/01/2016 - 31/12/2016 Duration: 1 year. Amount granted: 9.650 €
 8. Reference: 2014 SGR 958
Title: Bioactivitat Molecular dels Aliments (MoBioFood)
Financing organisms: Agència de Gestio d'Ajuts Universitaris i de Recerca (AGAUR)
IP: **ARDÈVOL GRAU, ANA MARIA**
Start-finish: 01/01/2014 - 31/12/2016 Duration: 3 years. Amount granted: 0 €
 9. Reference: PEC14-1-002
Title: Innovació en teràpies de control de pes
Financing organisms: Agència de Suport a l'Empresa Catalana (ACC1Ó)
IP: **ARDÈVOL GRAU, ANA MARIA**
 10. Start-finish: 08/05/2015 - 07/05/2016 Duration: 1 year Amount granted: 4.200 €
Title: Dosificació d'un extracte de procianidines de pinyol de raïm de composició coneguda amb efecte saciant // Utilització de procianidinas per a la supresión del apetito o inducción a la saciedad (PCT)
Financing organisms: Universitat Rovira i Virgili
IP: **ARDÈVOL GRAU, ANA MARIA**
Start-finish: 11/12/2015 - 11/12/2015. Amount granted: 3.065,2 €
 11. Reference: AGL2011-23879
Title: INTERACCION DE LOS FLAVONOIDES CON EL SISTEMA ENTEROENDOCRINO. REPERCUSIONES SOBRE LA FUNCIONALIDAD PANCREATICA Y EL CONTROL DE LA INGESTA.
Financing organisms: Ministerio de Ciencia e Innovación. Subdirección
IP: **ARDÈVOL GRAU, ANA MARIA**
Start-finish: 01/01/2012 - 01/01/2014 Duration: 3 years. Amount granted: 121.000 €

C.4. Contracts, technological or transfer merits

Patents:

1. Title: Composición y método para modular la ingesta de alimentos. Participation as: Inventor.
Registered: P202030846 (ref: 165-2020). 07 August 2020)
2. Title: Hidrolizados de garras de patas de pollo, sus péptidos y usos de los mismos. Participation as: Inventor. Registered: ES201731065. 2017
3. Title: Utilización de proantociandinas para la supresión del apeetito o inducción del saciedad. Participation as: Inventor. Registered: PCT/ES2015/070751. 2014

Contracts:

1. Title: Bitter-Fi: BITTER-FI: Combatent la inapetència amb molècules naturals. Financing organisms: FURV-Feder. IP: **ARDÈVOL GRAU, ANA MARIA**
Start-finish: 01/05/2021 - 31/12/2021. Duration: 8 meses. Amount granted: 15.000 €
2. Title: Envelliment saludable i sostenible amb aliments rics en proteïnes d'insecte(ESSARPI). Financing organisms: Diputació de Tarragona. IP: MTeresa Blay Olivé
Start-finish: 03/09/2020 - 31/5/2021. Duration: 8 meses. Amount granted: 15.000 €
3. Title: Aliment! Què fas al meu intestí?. Financing organisms: FUNDACIO PRIVADA PARC CIENTIFIC DE BARCELONA. IP: **ARDÈVOL GRAU, ANA MARIA**
Start-finish: 09/4/2018 - 19/4/2018. Duration: 4 days. Amount granted: 800 €
4. Title: Novel system to evaluate in vivo ligand-receptor binding by Surface Plasmon Resonance and its application to determine bitter molecules. MSCA proposal 747360. Marie Skłodowska-Curie Actions Seal of Excellence. Financing organisms: EU. Participating as researcher.
Start-finish: 01/09/2016.