Application for a Major Documentation Project

Q1 Applicant details

Title

Dr

First name

Andrea

Family name

Berez

Primary contact address

Address line 1

University of Hawaii Department of Linguistics

Address line 2

1890 East West Road

Town/City

Honolulu HI

Postcode

96822

Country

United States

Email

aberez@hawaii.edu

Telephone - landline

+1 808 956 3240

Telephone - mobile

+1 805 259 7953

Current appointment or position

Title of position, job, or course of study

Assistant Professor, Department of Linguistics

Name of institution

University of Hawaii

Address line 1

1890 East West Road

Address line 2

Moore Hall 579

Town/City

Honolulu HI

Postcode

96822

Country

United States

Phone number (why is this needed ?)

+1 808 9568602

How is your position currently funded?

I am in a permanent tenure-track position (category I-3, 9 month).

Q1a Co-applicant details
Complete for each co-applicant (maximum 3 permitted).

Co-applicant 1

Name

Jonathan Amith

Email

jonamith@gmail.com

Current position

Research Fellow

Current institution

Gettysburg College

Co-applicant 2

Name

Email

Current position

Current institution

Co-applicant 3

Name

Email

Current position

Current institution

Q2 Host institution
The host institution which will administer the award.

Host Institution

University of Hawaii

Address line 1

2440 Campus Road, Box 368

Address line 2

Office of Research Services

Town/City

Honolulu HI

Postcode

96822-2234

Country

United States

Phone number (why is this needed ?)

+1 808 956 5198

Host institution representative name

Patricia Donegan

Host institution representative email address

donegan@hawaii.edu

Principal applicant's link to the host if not currently employed or enrolled there

N/A (current employee)

Support from your host institution

Complete the box below with a statement from your sponsor demonstrating a commitment to supporting and providing facilities for your project. Please refer to the guidance notes in the information pack regarding institutional support.

(Maximum 500 words)

Dr. Andrea Berez of the Department of Linguistics at the University of Hawai'i and Dr. Jonathan Amith of Gettysburg College have requested support for a major project to document ethnobotanical knowledge in six languages of Oceania and Mesoamerica. As part of this project they intent to include several other team leaders: Emerson Odango, a PhD candidate in our department; Gary Holton of the University of Alaska Fairbanks; and Yuni Kim of the University of Manchester.

As chair of the department I am writing to endorse this project. First, Dr. Berez and Dr. Amith will receive the full support of the department with regard to the use of facilities. We provide computers and office space for Dr. Berez, and we maintain a language documentation lab with equipment, some of which will be used in this project (recorders, microphones, etc.). We also can provide housing on-campus at a low cost for Dr. Amith when he visits Dr. Berez in Honolulu. If the grant is successful, Dr. Amith will be given Affiliate Faculty status in our department.

We can also provide full logistic and administrative support for the project. Our departmental office managers and the fiscal officer in the College of Languages, Linguistics and Literature have administered other ELDP grants and are familiar with procedures. In terms of technical support, the College maintains a Center for Language Technology with several IT specialists, should they be needed. Furthermore, our digital language archive, Kaipuleohone (of which Dr. Berez is the director) is maintained by the IT staff at Hamilton Library.

Intellectually, our department and the university are prepared to fully support Dr. Berez and Dr. Amith in this research project, which is consistent with our mission to work toward the documentation of endangered languages worldwide, and especially of biocultural diversity. Our chancellor has recently approved an interdisciplinary Biocultural Research Initiative, which means that Berez and Amith's project will be well in line with our goals to preserve endangered ethnobotanical knowledge worldwide.

In summary, the Department of Linguistics is prepared to fully support the current proposal in all intellectual, administrative, logistic and technical arenas. We are aware that ELDP does not pay overhead of any kind.

Sincerely,

Patricia Donegan, PhD

Chair, Department of Linguistics

Host institution signature and date

Q3 Title of projec

(Maximum 20 words)

Documentation of Ethnobotanical Knowledge in Oceania and Mesoamerica, Two Areas of High Linguistic and Biological Diversity

Q4 Duration of project

State how many months of funding you are applying for.

36

Q5 Proposed start date

(dd/mm/yy)

01/07/2015

Q6 Previous ELDP grants

If you or any participant in your project have held a grant with us before or are currently holding an ELDP grant please state the reference number.

Berez: MDP0305 (Active). Amith: MDP0272 (Active), MDP0201 (Finished), PPG0048 (Finished). Holton FTG0148.

Describe briefly what you and/or your project participants have deposited with ELAR from previously held or current grant/s and provide url if applicable.

(Maximum 300 words)

Amith: 2 grants on Yoloxóchitl Mixtec: PPG0048 ("Corpus and lexicon development: Endangered genres of discourse in Tu'un ísaví (Mixtec) of Yoloxochitl, Guerrero"; 2008–9); MDP0201 ("Corpus and lexicon development: Endangered genres of discourse and domains of cultural knowledge in Tu'un ísaví (Mixtec) of Yoloxóchitl, Guerrero"). After an extremely favorable review of the final report, the panel concluded: "This project seems to be a good candidate for a special commendation, in light of its highly successful outcomes and capacity to model collaborative approaches to documentation." Included:
• 415 transcribed digital recordings; 29 music recordings: 111.5 hrs.
• 48 additional transcribed recordings: ~6 hours
• 22 files from neighbouring village of Buenavista: ~22.5 hours
• Elicitation recordings ~65 hours
• 7,920 files of 10 speakers uttering 261 words 6 times each; with TextGrid hand segmented Praat files
• Five (now eight) articles/presentations
• Dictionary 2089 headwords; 999 pages
• Chapters on phonology, clitics

Amith has an active grant, MDP0272 ("Documentation of Nahuat Knowledge of Natural History, Material Culture, and Ecology in the Municipality of Cuetzalan, Puebla"). It will yield ~750 digital recordings and time-coded transcriptions on ethnobotanical knowledge.

Berez: MDP0305-"Videography-based documentation of Kere (Papua New Guinea) in sociocultural perspective", 2014–17. The primary products are a linguistic corpus: 30 hours transcribed, annotated video and a series of eight short documentaries about genres of Kere language, designed for local and popular audiences. The corpus and films will capture Kere language in situ with special attention to (i) visual and locational context, (ii) culturally salient settings, and (iii) socially- informed and interactive nature of Kere language use.

Holton: FTG0148 "Enriching the media corpus for Western Pantar (Lamma), a Papuan outlier language of eastern Indonesia", 2008. Primary products are a media corpus (housed by arrangement with ELDP at MPI) and a published print and online multimedia dictionary of this previous undocumented Alor-Pantar language.

Q7 Is this a re-submission?

If yes, provide date, reference number (if known) and type of grant originally applied for.

N/A

This question is only for applicants who are re-submitting. Provide details of revisions you have made. If you have received specific feedback on a previous application, provide detailed information on how you have responded to the feedback.

N/A

Q8 Other funding applications

Provide details of other funding applications or recent applications to other bodies for identical or closely related work. Include date, body, title of project, duration, amount sought and outcome if known.

None.

Q9 Commitment to the project
State for each applicant the intended average number of hours and overall % time per week to be devoted to the project.

Name	Hours	% Time per week
Andrea Berez	4.7 hrs average (88 days total over 3 years)	11.7
Jonathan Amith	4.7 hrs average (88 days total over 3 years)	11.7
Gary Holton	3.7 hrs average (70 days total over 3 years)	9
Emerson Odango	3.7 hrs average (70 days total over 3 years)	9
Yuni Kim	7.4 hrs average (140 days total over 3 years)	18

Q10 Summary of proposed project
This information will be used on our website if you are funded. Include details of the language community, the country and region, and an estimate of number of speakers.

(Maximum 100 words)

This project documents the threatened domain of traditional ecological knowledge in six endangered language communities in Oceania (Kere, Papua New Guinea; Nómwonweité, Micronesia; Abui, Indonesia) and Mexico (Amuzgo, Huave, and Yoloxóchitl Mixtec). Six research teams, each headed by an experienced linguist and fieldwork with long-term commitments to the targeted communities, will build a database of plant nomenclature, classification and use, backed up by voucher specimens and digital photographs. A team of native experts will discuss each plant in digital recordings; selected texts will be transcribed and translated. Collaboration with expert taxonomists ensures accurate identification to species of all documented plants.

Q10a ISO-639 code
Give the ISO code for the language if available as given on www.ethnologue.com. If the variety or language is not listed there, leave blank and provide a brief explanation in the commentary field at the end of Q10.

Please see the commentary for the full list of languages covered by this project.

Q10b Geographical Reference
Latitude

See commentary below

Q10b Geographical Reference
Longitude

See commentary below

Q10c Language family
If possible name the language family

See commentary below

Q10d Country
List the country/countries where the language is spoken

- Papua New Guinea
- Micronesia, Federated States of

- Mexico
- Indonesia

Q10e Location of documentation

List the country/countries where the language is documented

- Papua New Guinea
- Micronesia, Federated States of
- Mexico
- Indonesia

Commentary

Provide additional information for Q10a-e if necessary about the specific situation for the language/s you are documenting.

OCEANIA:
1. Kere language (sst):
Location: Lat -6.111251, Long 145.034981
Family: Trans-New-Guinea, Chimbu-Wahgi, Chimbu
Country: Papua New Guinea
Location of documentation: Papua New Guinea

2. Abui language (abz)
Location: Lat -8.27297, Long 124.72311
Family: Timor-Alor-Pantar
Country: Indonesia
Location of documentation: Indonesia

3. Nómwonweité language (nmt):
Location: Lat 8.592772, Long 149.690864
Family: Austronesian > Malayo-Polynesian > Eastern Malayo-Polynesian > Oceanic > Micronesian Proper > Ponapeic-Trukic > Trukic.
Country: Federated States of Micronesia
Location of documentation: Federated States of Micronesia

MESOAMERICA:
4. Yoloxóchitl Mixtec language (xty):
Location: Lat 16.816082, Long -98.685923
Family: Oto-Manguean > Mixtecan languages > Mixtec languages > Southern Baja (Mixtec) > Guerrero (Mixtec)
Country: Mexico
Location of Documentation: Mexico

5. Hauve language (hue):
Location: 16.337437,-94.515651
Family: Huavean (language isolate)
Country: Mexico
Location of documentation: Mexico

6. Amuzgo language (azg):
Location: 16.654448,-98.097023
Family: Oto-Manguean > Eastern Oto-Manguean
Country: Mexico
Location of documentation: Mexico

Q11 Specific outcomes

Specific outcomes of the proposed documentation project.

(Maximum 750 words)

Given the experience of the research team leaders (Berez, Amith, Holton, Odango, Kim) and their familiarity with the languages and communities targeted for ethnobotanical research, this project will yield an immense amount of varied, high quality data in an endangered and difficult to document domain of traditional knowledge in six different languages.

TANGIBLE PRODUCTS THAT WILL RESULT FROM THIS PROJECT

• CORPUS OF AUDIO RECORDINGS, TRANSCRIPTIONS, TRANSLATIONS: For each of the 6 languages, 25–30 hours of high-quality digital recordings will be produced on native traditional ecological knowledge, particularly the nomenclature, classification, and symbolic and economic use of local flora. For each language, 8–10 hours of this material will be transcribed in time-aligned format (ELAN; using IPA or a local orthography as appropriate) and accompanied by free translations into the national vernacular (English, Spanish, and/or Tok Pisin).

• BOTANICAL VOUCHER SPECIMENS AND HIGH-QUALITY DIGITAL PHOTOGRAPHS: Fieldwork in each community will comprise approximately 10 days of recording and 30 days of botanical fieldwork, which should yield 250–350 collections. Each collection will comprise 3–4 voucher specimens for an equal number of herbaria (one national herbarium [in PNG, Micronesia, Indonesia, Mexico]; one US deposit herbarium [Bishop Museum, National Tropical Botanical Garden, Smithsonian Institution]; one voucher for an expert in the relevant botanical family; one extra voucher when possible). Each plant will be digitally photographed in the field and the database will include all relevant information for proper specimen labels (coordinates, vegetation and habitat, in situ plant description). Special care will be taken to ensure the most accurate determination to species in Western scientific nomenclature to provide a universal reference for local knowledge. Each plant collected will be described minimally by a short recording by native experts. More extensive recordings will be made, including discussions between two expert native natural historians, about plants with high economic or symbolic value.

• DATABASE OF LOCAL FLORA: In each community the team leader will develop a database of local flora nomenclature, classification, and use. Most of the plants that are named, classified, and used will be documented through voucher specimens, photographs, and recordings. Some plants will not be located during the three or four field trips. Nevertheless they will be documented through field notes and described through digital recordings by native natural historians.

• LOCAL EDUCATIONAL MATERIAL/FIELDGUIDES: Each team will present the host community with an audio-visual portfolio of local traditional ecological knowledge in the local language. An illustrated fieldguide of all collected material will be prepared: each entry will be accompanied by one or more photographs; a synthesis of local nomenclature, classification, and use; and the Western scientific binomial name. Printed and digital copies of the fieldguides will be left in the community and national herbaria.

• AN ARCHIVED COLLECTION: All project material will be deposited and made freely available through the ELAR and the Kaipuleohone UH Digital Language Archive. Deposits will be made yearly during the project; derivative material (articles, presentations) developed after project conclusion will be archived as well. The material to be produced comprises the following:
• the linguistic corpus: approximately 150–200 hours of digital recordings from six communities;
• a guide to transcription conventions and orthography;
• an ethnobotanical database of all local plant knowledge (including plants discussed with native consultants but not collected in vouchers). This database will contain information on nomenclature, classification, and economic and symbolic use of each plant; determinations to species; and the appropriate botanical collection data for labeling;
• a topical lexical database of all plant names and other related vocabulary: parts of plants, foods, objects of material culture made from plants (the plants used in the elaboration of these objects will be listed in native and Western scientific nomenclature), soil types, terms for weather, common agricultural pests and plant diseases;
• field photographs of each plant collected;
• ethnobotanical fieldguides in pdf/a format
• all published and unpublished articles as well as presentations that may derive from this project;
• a metadatabase conforming to OLAC and ELAR standards.

INTANGIBLE BENEFITS OF THIS PROJECT
The project team hopes that this project will become a high-profile multimedia (photographs, recordings) effort that will impact the public and increase awareness of the value of endangered language research and native natural history knowledge not only in Oceania and Mexico, but in general. The team also hopes that the methodology pioneered in this effort (combining photography, native language recordings, close collaboration with skilled taxonomists) will serve as a model to future efforts to document ethnobiological knowledge in endangered language research.

Q12 Detailed description of the project
(Maximum of 3,000 words across the 4 headings)

Language context

INTRODUCTION: This project will document threatened ethnobotanical knowledge in six communities in two regions, Oceania and Mexico, through a coordinated effort among experienced researchers with long-term commitments to the communities. Each of the six subprojects will utilize a methodology pioneered in endangered language documentation: the creation of a corpus of primary digital recordings, including conversations among native natural historians on a threatened domain of traditional knowledge. To reduce costs, the three projects in each region will coordinate collection of botanical voucher specimens by establishing regional plant processing "hubs" in various herbaria (the National Tropical Botanical Garden and Bishop Museum in Hawai'i for Oceania collections; the SERBO herbarium in Oaxaca City and the Smithsonian for plants collected in Mexico; see work plan, Q14). Given the parallel research interests among all six subprojects, they share similarities in intellectual merit and research outcomes. For this reason single narratives in two of the four sections of the Project Description (ii. Documentation methods, and iv. Intellectual merit and research outcomes) are applicable to all. Given particularities in each community and language, however, the remaining sections (i. Language context and iii. Community contexts) are described separately for each subproject.

OCEANIA

PNG: Kere is a member of the Chimbu-Wahgi family of Trans-New-Guinea, spoken by approximately 2000 people in seven communities of Simbu Province. Wurm & Hattori (1981) indicated over 50,000 speakers, but that number is no longer valid, as only about half of Kere children learn Kere as their first language. Chimbu languages are typologically distinct from neighboring highland languages (Foley 1986), although they show some typical features of Trans-New-Guinea, including serial verb constructions, adjunct nominal+generic verb constructions, and clause chaining. Of phonetic interest is the reflex of the typologically unusual velar lateral phoneme found in other highland languages; Kere also lacks prenasalization of voiced plosives found in its neighbors and across TNG. Tone is salient to speakers, and most are aware that Kere language has "tune." However, the tonal typology of Chimbu languages is not clear. Kuman, for example, bears features of true tone languages (e.g., contrastive lexical pitch) and pitch accent languages (e.g., tone spread across word boundaries), as well as pitch features typical of neither (e.g., the morpheme is the domain of tone; Hardie 2003). Berez heads the Kere research team; she currently holds an ELDP MDP (0305) on Kere.

MICRONESIA: Nómwonweité is spoken in situ by approximately 1,300 people (Chuuk Branch Statistics Office 2003), with a few hundred more in diasporic areas within the FSM, geographic Micronesia more broadly, and in the United States. Among all Micronesian languages, Nómwonweité is one of the least-studied. The language is spoken by one of the last ethnic groups in Micronesia that still practice traditional open ocean navigation. Nómwonweité is typologically interesting for contrasting /ʔ/ and /r/, the former being a particularly rare sound in Oceania; the language also has a phonemic /h/, which is typologically rare in Micronesian languages. Previous investigation by Odango (head of the Nómwonweité research team) indicates that the language is in a process of reanalyzing subject proclitics as grammatical agreement. Odango has worked previously with speakers of the Onoun and Piherarh dialects of Nómwonweité and has extensive experience living and working in coral atoll environments. Odango is fluent in Mortlockese, a language with a high degree of mutual intelligibility with Nómwonweité.

INDONESIA: Abui (abz) is a member of the Timor-Alor-Pantar (TAP) family, the western-most family of non-Austronesian languages in Indonesia. TAP includes all but one of the languages spoken in the Alor-Pantar archipelago, as well as four additional languages spoken on neighboring Timor. Though TAP has long been assumed to be part of the larger Trans-New Guinea family, new data from the past decade provide insufficient support for this hypothesis and suggest that TAP should be considered a family-level isolate (Robinson and Holton 2012). Within TAP Abui shows many distinct features, including an incipient tone system and elaborate differential object marking (Kratochvíl 2007, Fedden et al. 2014). With some 16,000 speakers Abui is one of the larger TAP languages. However, rapid urbanization and development have placed increasing pressure on the language, and shift to Malay is in progress. Holton's work with Abui and other TAP languages is ongoing. Fieldwork in 2013 focused on comparison of kinship systems, including a detailed description of the Abui kinship system (Holton 2014). Fieldwork in 2015, apart from this grant, will focus on documentation of landscape terminology in Abui, building on work conducted for other TAP languages (Holton 2011).

MEXICO

Yoloxóchitl Mixtec: Mixtecan languages (in the Oto-Manguean stock; Suárez 1983:26), comprise three branches: Cuicatec, Triqui, and Mixtec. The latter is highly varied and comprises, depending on the analyst, from "over twenty" (Bradley and Hollenbach 1988:1) to fifty-three (Ethnologue) languages. Yoloxóchitl Mixtec (YM), one of six Guerrero Mixtec languages (Josserand 1983) is spoken in four Pacific Coast villages of southern Guerrero: Yoloxóchitl (pop. 3,000), Arroyo Cumiapa (pop. 1,500), Cuanacaxtitlan (pop. 4,000), and Buenavista (pop. 5,000). In the latter two, shift to Spanish characterizes the younger generation. In the former (Yoloxóchitl and Arroyo Cumiapa) YM is still spoken by adolescents, though heavily marked by lexical loss, shift to Spanish, and "stylistic shrinkage" (Campbell and Muntzel, 1989; Palosaari and Cambbell, 2011), i.e., loss of fluency in particular domains of discourse including traditional ecological knowledge, the focus of this present project. YM is a verb initial (VSO) language. Left dislocation marks focus and new information. Phonologically it is characterized by its high number of tonal contrasts (nine basic tones and over twenty three lexical tonal melodies on bimoraic stems). It is unusual among Mixtec languages for its high number of reduced compounds and ample use of tone in inflectional and derivational morphology. Amith has worked on YM since 2008, focusing on phonetics, phonology, and morphology.

Amuzgo: The San Pedro Amuzgos variety of Amuzgo is spoken by approximately 4,000 people in the Putla district of Oaxaca. While monolinguals are still found among the oldest generation, many children are no longer learning it as their first language and it is not uncommon to meet people in their 20s and 30s with only passive knowledge of Amuzgo. The subgrouping of Amuzgo within Oto-Manguean is controversial due to paucity of research, obscured further by its close geographical proximity to related languages, but it appears to form one of the smallest independent branches of Eastern Oto-Manguean. Amuzgo has a complex system of non-concatenative morphology, which draws on eight contrastive tones and three phonation types to create multiple layers of inflectional classes on different morphophonological dimensions, forming hundreds of combinatorially possible paradigms. Kim has done fieldwork in Oaxaca since 2004 and has worked closely with native speaker linguist Fermín Tapia García over three trips to San Pedro Amuzgos. She has been an invited speaker on Amuzgo at two recent workshops on Oto-Manguean linguistics.

Huave: Huave is a language isolate, albeit for centuries in heavy contact with Mayan, Mixe-Zoquean, and Oto-Manguean languages and manifesting many Mesoamerican areal features. It is spoken in only four villages of southern Oaxaca. The San Francisco del Mar variety (the most divergent of the four) is nearly extinct, with about 50 remaining fluent speakers, all over 70. The Huave are fishermen, living on sandy peninsulas that separate lagoons from the Pacific Ocean, and have intimate knowledge of this tropical estuary environment. Huave language is an agglutinating language with typologically unique "mobile affixes" that surface as either prefixes or suffixes depending on morphophonological factors, and it is phonologically divergent from other Mesoamerican languages (e.g., its lack of glottalization). Kim has been working on San Francisco del Mar Huave, her dissertation topic, for over 10 years, and is a conversationally fluent speaker.

Documentation methods

Linguistic documentation of ethnobotanical knowledge involves four major areas of activity: (1) collaboration with native natural historians to identify plants named, classified, and used by the community; (2) digital recording of speech about local flora and its uses; (3) voucher collection of botanical specimens; (4) creation of a topical dictionary on plant and related terminology.

1. Each team will dedicate 30 days to collection of local flora with native experts. All plant knowledge will be documented in a comprehensive database of local names, classifications, and uses. As many of these plants as possible will be collected, pressed, and dried for herbarium deposit and determination to species by taxonomists. High quality digital photographs will be taken of all plants (Amith, who has experience in this will train the photographers for each team). The photographs will be used for provisional scientific determinations and for producing illustrated botanical fieldguides as part of the documentation effort.

2. Native experts, selected for their botanical knowledge and eloquence of expression, will be recorded. At least one recording will be made for each plant collected or mentioned. Additional extensive recordings will be made about the most useful plants (e.g., for house construction, material culture, food). For conversations among two native experts, each will be separately miked to facilitate transcription. Recordings will be at 48KHz, 16-bit, using a headworn unidirectional condenser mic with XLR connectors (Shure SM35 or the equivalent, see equipment). Time-coded transcriptions of approximately nine hours per language (selected from 25–30 hours of total recordings) will be archived in ELAN format. A separate document for each language will set out the orthographic conventions used.

3. All plants named, classified, and used locally will be included in a general database documenting each community;

collections will be made of any such plant encountered in a fertile (flowering or fruiting) stage. The target is 300 to 350 collections per community. Each collection will have three or four vouchers for herbarium deposit (see work plan) and determination to species (see Intellectual merit, below). The experience of the botanists consulting on this project (Conn, James, Lorence, Salas) and collaboration with herbaria and botanists in the country of research ensure highly accurate species determinations.

4. A lexical database will be created for each community covering all terms associated with ethnobotanical knowledge (plant names, parts of plants, material culture made from plant material, names for house parts, foods). Many entries in this database will be encyclopedic in form (e.g., a description of preparation of a given edible plant). The database will be developed in Toolbox or FLEx.

Community contexts

PNG: Berez has a demonstrated link to the Kere community via her current ELDP MDP to document Kere. That project includes the involvement of filmmaker and Kere speaker Bafinuc Ilai, centrally involved in this project as the photographer. Shelley James (botanist, Bishop Museum, Honolulu) is facilitating involvement of PNG botanists from the botanical garden in Lae, PNG. These botanists will train Ilai and other Kere people in specimen collection. Furthermore, Berez's graduate student Samantha Rarrick will assist the language documentation process. The Kere community is comfortable with open access.

Micronesia: Odango has a demonstrated link to the Nómwonweité community through his previous volunteer work with Island Research & Education Initiative (non-governmental organization based in Pohnpei). He will use his links to identify local members of the Nómwonweité community to be trained in botanical specimen collection and to work as assistants in translation/transcription. Odango is aware of the sociocultural sensitivities involved in fieldwork in Micronesia, such as utilizing honorific vocabulary in interview contexts and asking permission before collections are made on private land. Regarding the Nómwonweité community's familiarity with principles of open access to data, Odango is prepared to explain the project details and open access principles to community members in the medium of Nómwonweité, using locally-relevant terminology in the context of previous research and the proposed project.

Indonesia: Holton has worked with speakers of Abui and other Alor-Pantar languages since 2004. Between 2009 and 2012 he worked on a collaborative project including students and researchers from Indonesia, the US, the Netherlands and the UK to investigate the linguistic prehistory of the Alor-Pantar languages (Holton et al. 2012; Klamer 2014). This work was conducted under the aegis of the European Science Foundation and received official research permission from the Indonesian Academy of Sciences (permit 04739/SU/KS/2006) and the Institutional Review Board of the University of Alaska Fairbanks. One of the collaborators on that project, Mr. Benediktus Delpada, is an Abui speaker with extensive linguistics training who is currently attending Nanyang Technical University in Singapore. Mr. Delpada will serve as the community liaison for this project.
In June 2013 Holton conducted a transect by foot across Abui territory from the village of Apui to the southern coast of Alor Island for the purposes of documenting lexical dialect variation. He is thus already intimately familiar with the Abui eco-region.
All data from Holton's previous work on Alor is archived with The Language Archive in Nijmegen. The community has no reservations about public sharing of language data. Holton and his colleagues have produced numerous publications for local use, such as practical dictionaries (Holton and Lamma Koly 2008, Kratochvíl and Delpada 2008).

Yoloxóchitl Mixtec: Amith has worked on Yoloxóchitl Mixtec since 2008. At the community level Amith has enjoyed full collaboration from village authorities and elders since commencing work. He has used ELDP funding to help equip the village library; he has left the community copies of all documentation and has organized a local presentation of his work. Since 2008 he has collaborated with and helped further train Rey Castillo García, a native speaker with a master's degree in linguistics. He has also trained another consultant, Esteban Guadalupe Sierra, in computer use and YM orthography. Both individuals will participate in this project (collection of botanical specimens, transcription and translation of corpus); the budget for their participation is in accord with what Amith has assigned for their help in previous projects.
Amith has documented languages in three regions of Mexico and has always followed the highest standards for ethical fieldwork: obtaining written and/or recorded consent from all participants, leaving copies of results with the community, and archiving all material under open access protocols. Amith's work on a previous ELDP grant on YM, which did not cover ethnobotanical documentation, was singled out for commendation by the panel upon receipt of the final report. The panel commented: "This project seems to be a good candidate for a special commendation, in light of its highly successful outcomes and its capacity to stand as a model for collaborative approaches to documentation."

Amuzgo: Kim has a demonstrated link to the Amuzgo community via her three previous visits to San Pedro Amuzgos,

funded by grants from the University of Manchester, where fieldwork was suggested and has been arranged and done with accompaniment from a close friend (resident in San Francisco del Mar) native to the village. Kim works closely with native speaker linguist Fermín Tapia García, author of a dictionary and several previous ethnobotanical works on Amuzgo (Tapia García 1978, 1980, 1985), and has been assisting him in editing his newer manuscripts, which are grammatical reference works intended for use in local schools. She is also in contact with a native Amuzgo speaker who is an undergraduate university student in linguistics. Kim will consult with these three main contacts to identify potential collaborators and to approach them and explain the project (including open-access principles), through interpretation into Amuzgo where appropriate.

Huave: Kim has a demonstrated link to the Huave community through in-situ fieldwork since 2004, funded by the Salus Mundi Foundation, the University of Manchester, and a 2011-2013 AHRC project. She is personally acquainted with most of the remaining speakers and their families in San Francisco del Mar, and has experience in sensitively navigating the complex sociolinguistic situation. She has worked closely with local language and cultural revitalization leaders, being invited to participate in community meetings and to co-develop pedagogical activities with teachers at a local primary school. She has also worked individually with heritage learners on master-apprentice techniques. The majority of speakers have been comfortable with open access to their linguistic data, and all speakers' wishes have been documented and respected. This project will be fully explained to potential participants using locally appropriate terminology.

Research outcomes

Given rapid changes in human-environment interactions, etnobotanical knowledge is particularly susceptible to loss, even in relatively vibrant linguistic communities (Hill, 2001; Zent 2001). The situation is even more dire in endangered language communities, reflecting what has been called "stylistic shrinkage," the uneven impact of language loss on distinct domains of discourse and semantics. This project targets this particularly endangered domain of traditional ecological knowledge in six communities; it will produce highly reliable and extensive (particularly given the per project budget) documentation on nomenclature, classification, and use of local flora combined with expert determinations to species provided by a team of uniquely qualified taxonomists.

In addition to the importance of recording plant nomenclature, classification and use to endangered language documentation, the progressive development of terminological data in regional studies will impact the study of cultural history. In Oceania, Mexico, and North America cognate plant name lists have been used to study prehistory, focusing on two major lines of research (see references, section 1a):

1) The reconstruction of proto forms using cognate sets of biosemantic terms in genetically related languages. The reconstructions are not only important for historical linguistics, in addition the denotata of proto forms can provide clues to the ecosystems of ancestral homelands.

2) The evaluation of biosemantic terminology to determine patterns of loanwords and calques among languages that are not historically related. Such borrowings can be used to suggest prehistoric migration patterns and the emergence of areal features that demonstrate cultural and linguistic contact.

Specific project outcomes are detailed in section 11. Research outcomes are more specific and relate to the contribution of the present project to both community-specific and comparative research. In regard to the former, the results of this project will contribute to both cognitive anthropology (how six communities name and classify their floristic environment) and economic botany (how six communities utilize local flora). In a comparative perspective the data obtained by each subproject will fit into ongoing research by others thus building up an empirical dataset that will advance regional studies.

References Provide a reference list for work on the language (include links to existing corpora if applicable)

Section 1: Intellectual merit references
Hill, Jane. 2001. " Dimensions of Attrition in Language Death." In Luisa Maffi, ed., On Biocultural Diversity: Linking Language, Knowledge, and the Environment. Washington, DC: Smithsonian Institution Press, pp., 175–89.

Zent, Stanford. 2001. " Acculturation and Ethnobotanical Knowledge Loss among the Piaroa of Venezuela: Demonstration of a Quantitative Method for the Empirical Study of Traditional Ecological Knowledge Change." In Luisa Maffi, ed., On Biocultural Diversity: Linking Language, Knowledge, and the Environment. Washington, DC: Smithsonian Institution Press, pp., 175–89.

Section 1a: Ethnobotanical nomenclature the study of cultural history (contact and migration)

Andersen, Henning. 2003. "Introduction," in Henning Andersen, ed., Language Contacts in Prehistory: Studies in Stratigraphy. Philadelphia: John Benjamins, pp. 1–10.

Andersen, Henning, ed. 2003. Language Contacts in Prehistory: Studies in Stratigraphy (Papers from the Workshop on Linguistic Stratigraphy and Prehistory at the Fifteenth International Conference on Historical Linguistics, Melbourne, 17 August 2001. Current Issues in Linguistic Theory 239. Philadelphia, Penn.: John Benjamins.

Balée, William, and Denny Moore. 1991. "Similarity and variation in plant names in five Tupi-Guarani languages (Eastern Amazonia)." Biological Sciences 35(4):209–62.

Berlin, Brent, Dennis E. Breedlove, Robert M. Laughlin, and Peter H. Raven. 1973. "Cultural significance and lexical retention in Tzeltal-Tzotzil ethnobotany. In Munro S. Edmonson, ed.,
Meaning in Mayan Languages. The Hague: Mouton, pp. 143–64.

————. 1969. "Lexical retention and cultural significance in Tzeltal-Tzotzil comparative ethnobotany." Paper presented at the 68th Annual Meeting of the American Anthropological Association, 20–23 November, 1969.

Bostoen, Koen. 2007. Bantu plant names as indicators of linguistic stratigraphy in the western province of Zambia. Doris Payne and Jaime Peña, eds., Selected Proceedings of the 37th Annual Conference on African Linguistics, pp. 16–29.

Bowern, Claire. 2007. "On Eels, Dolphins, and Echidnas: Nyulnyulan Prehistory through the Reconstruction of Flora and Fauna.: In Alan Nussbaum, ed., Verba Docenti: Studies in historical and Indo-European Linguistics, Presented to Jay H. Jasanoff by Students, Colleagues, and Friends. Ann Arbor: Beechstave Press, pp. 39–53.

————. (work in progress with Patrick McConvell). 2011. "Reconstruction in ethnobiological systems of Australian languages." PowerPoint presentation. Australian Nacional University.

Campbell, Lyle, Terrence Kaufman, and Thomas Smith-Stark. 1986. "Meso-America as a linguistic area." Language 62:530–70.

Dakin, Karen. 2003. "Uto-Aztecan in the linguistic stratigraphy of Mesoamerican prehistory," in Henning Andersen, ed., Language Contacts in Prehistory: Studies in Stratigraphy. Philadelphia: John Benjamins, pp. 259–88.

Fowler, Catherine S. 1972a. "Comparative Numic ethnobiology." Ph.D. dissertation, University of Pittsburgh.

————. 1972b. "Some ecological clues to Proto-Numic homelands." In D. D. Fowler, ed., Great Basin Cultural Ecology: A Symposium. Reno, Nev.: Desert Research Institute Publications in the Social Sciences, no. 8, pp. 105–21.

————. 1983. Lexical clues to Uto-Aztecan prehistory. International Journal of American Linguistics 49:224–57.

Friedrich, Paul. 1970. Proto-Indio-European Trees: The Arboreal System of a Prehistoric People. Chicago: University of Chicago Press.

Meroz, Yoram. 2013. "Large-scale vocabulary surveys as a tool for linguistic stratigraphy: A California case study." Paper presented at the 39th Berkeley Linguistic Society Meetings, Feb. 16–17, 2013.

Siebert, Frank T. 1967. "The original home of the proto-Algonquian people." Contributions to Anthropology: Linguistics I. National Museum of Canada Bulletin 214:13–47.

Smith-Stark, Thomas C. 1982. "Mesoamerican calques." Paper presented at the symposium on Mesoamerican dialectology and language history, 44th International Congress of Americanists, Manchester, England.

————. 1994. Mesoamerican calques. I. In Carolyn J. MacKay and Verónica Vázquez, eds., Investigaciones lingüisticas en Mesoamérica. Mexico City: Universidad Nacional Autónoma de México, pp. 15–50.

Whistler, Kenneth W. 1977. "Wintun prehistory: An interpretation based on linguistic reconstruction of plant and animal nomenclature." Proceedings of the Berkeley Linguistic Society 3:157–74.

Section 2: Language specific bibliographies
Papua New Guinea: Kere

Cappell, Arthur (Recorder & Complier). n.d. Tabare (gospel recording), Yaru (rel. Yabêm), Taêmail (gospel recording), Nagipaem (gospel recording), Palai, Sambes, Sinasina. Pacific And Regional Archive for Digital Sources in Endangered Cultures (PARADISEC). oai:paradisec.org.au:AC1-408.

Foley, William A. 1986. The Papuan Languages of New Guinea. Cambridge: Cambridge University Press.?

Hardie, Peter. 2003. Is Kuman Tonal? Australian National University MA Thesis.

McVinney, Paul A. & Luzbetak, Louis J. 1954. Tabare Dialect. Volume 1: Grammar. Catholic Mission.

The Long Now Foundation. n.d. Geneses. Kundiawa, Papua New Guinea: New Tribes Mission.?

Micronesia
Chuuk Branch Statistics Office. 2003. Chuuk State detailed tables: 2000 FSM census of population and housing. Weno, Chuuk: Chuuk Branch Statistics Office, Division of Statistics, Department of Economic Affairs, FSM National Government.

Davis, Alan E. 1999. A preliminary list of animal names in the Chuuk district, Micronesia with some notes on plant names. Micronesica 31(1):1–245.

Falanruw, Marjorie C., Jean E. Maka, Thomas G. Cole, & Craig D. Whitesell. 1990. Common and scientific names of trees and shrubs of Mariana, Caroline, and Marshall Islands. Berkeley, CA: Pacific Southwest Research Station.

Goodenough, Ward H. & Hiroshi Sugita. 1980. Trukese–English dictionary. Memoirs of the American Philosophical Society, vol. 141. Philadelphia, PA: American Philosophical Society.

Jackson, Frederick Henry. 1983. The internal and external relationships of the Trukic languages of Micronesia. University of Hawai'i at M?noa Ph.D. dissertation.

Wagner, Warren L., Derral R. Herbst, Michael W. Tornabene, A. Weitzman & David H. Lorence. Ongoing. Flora of Micronesia website. http://botany.si.edu/pacificislandbiodiversity/micronesia/index.htm [23 December, 2014].

Stone, Benjamin C. 1959. The flora of Namonuito and the Hall Islands. Pacific Science XIII:88–104.

Alor Archipelago
Fedden, Sebastian, Dunstan Brown, Frantisek Kratochvil, Laura C. Robinson and Antoinette Schapper. 2014. Variation in pronominal indexing: Lexical stipulation vs. referential properties in Alor-Pantar languages. Studies in Language 38(1).44–79.

Holton, Gary. 2011. Landscape in Western Pantar, a Papuan outlier of southern Indonesia. In D.M. Mark, A.G. Turk, N. Burenhult and D. Stea, eds., Landscape in Language (Culture and Language Use: Studies in Anthropological Linguistics). Amsterdam: John Benjamins, pp. 143–66.

————. 2014a. Kinship in the Alor-Pantar languages. In M. Klamer, ed., Alor Pantar Languages: History and Typology. Berlin: Language Sciences Press, pp. 199-246.

————. 2014b. Sketch of Western Pantar (Lamma). In A. Schapper, ed., Papuan Languages of Timor-Alor-Pantar: Sketch grammars. Canberra: Pacific Linguistics, p. 23-96.

————, and Mahalalel Lamma Koly. 2008. Kamus Pengantar Bahasa Pantar Barat. Kupang, Indonesia: UBB-GMIT.

————, Marian Klamer, František Kratochvíl, Laura C. Robinson, and Antoinette Schapper. 2012. The historical relation of the Papuan languages of Alor and Pantar. Oceanic Linguistics 51(1).87-122.

Klamer, Marian, ed. 2014. Alor Pantar Languages: History and Typology. Berlin: Language Sciences Press.

Kratochvíl, František. 2007. A Grammar of Abui. Leiden University Ph.D. dissertation.

————, and Benny Delpada. 2008. Kamus Pengantar Bahasa Abui. Kupang, Indonesia: UBB-GMIT.

Robinson, Laura C. and Gary Holton. 2012. Reassessing the wider genetic affiliations of the Timor-Alor-Pantar languages. In H. Hammarström and W. van der Heuvel, eds., History, Contact and Classification of Papuan Languages, (Language and Linguistics in Melanesia, Special Issue 2012 Part I). Port Moresby: Linguistic Society of New Guinea, pp. 59–87.

Mixtec
Materials cited
Bradley, C. Henry, and Barbara E. Hollenbach. 1988. Introduction. In C. Henry Bradley and Barbara E. Hollenbach, eds, Studies in the Syntax of Mixtecan Languages. vol. 1. Arlington, Tex.: Summer Institute of Linguistics and the University of Texas at Arlington, pp. 1–10.

Campbell, Lyle, and Martha C. Muntzel. 1989. The structural consequences of language death. In Nancy C. Dorian, ed., Investigating Obsolescence: Studies in Language Contraction and Death. Cambridge: Cambridge University Press., pp. 181–96.

Josserand, Judy Kathryn. 1983. Mixtec Dialect History. Ph.D. thesis, Tulane University. 711 pp
Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig, eds. 2014. Ethnologue: Languages of the World, Seventeenth edition. Dallas, Texas: SIL International. Online version: http://www.ethnologue.com.

Palosaari, Naomi, and Lyle Campbell. 2011. Structural aspects of language endangerment. In Peter K. Austin and Julia Sallabank, eds., The Cambridge Handbook of Endangered Languages. Cambridge: Cambridge University Press, pp. 100–19.

Suárez, Jorge A. 1983. The Mesoamerican Indian Languages. Cambridge: Cambridge University Press.

Works on Guerrero Mixtec including Yoloxóchitl
Alacatlatzala:
Anderson, Lynn. 1993. You can say that again: Repetition in Alacatlatzala Mixtec. SIL Mexico Workpapers 10:38–53.

Zylstra, Carol F. 1980. Phonology and morphophonemics of Mixtec of Alacatlazala, Guerrero. SIL Mexico Workpapers 4:15–42.

————1991 "A syntactic sketch of Alacatlatzala Mixtec," in Hollenbach and Bradley, III:1–177)
1 short SIL vernacular publication listed at Ethnologue

Alcozauca:
Stark C, Sharon (Sara), Audrey Johnson P., Benita González de Guzmán. 2006. Diccionario básico del mixteco de Xochapa, Guerrero. Mexico City: Instituto Lingüístico del Verano. 150 pp. [about 700 entries, with some subentries and example phrases]
3 short SIL vernacular publications listed at Ethnologue

Ayutla:
Hills, Robert A. 1990 "A syntactic sketch of Ayutla Mixtec," in Hollenbach and Bradley, II:1–260.

Hills, Robert A., and William R. Merrifield. 1974. Ayutla Mixtec, just in case. IJAL 40:283–91.

Pankratz, Leo, and Eunice V. Pike. 1967. Phonology and morphotonemics of Ayutla Mixtec. IJAL 33:287–99.

11 short SIL vernacular publications listed at Ethnologue

Metlatonoc:

Overholt, Edward. 1961. The tonemic system of Guerrero Mixteco. In Benjamin F. Elson and Juan Comas, eds., A William Cameron Townsend. Mexico City: Centro de Investigaciones Antropológicas de México. pp. 597–626.
no vernacular publications listed at Ethnologue

Yoloxochitl
Castillo García, Rey. 2007. "Descripción fonológica segmental y tonal del mixteco de Yoloxóchitl, Guerrero." Thesis para Maestría en Lingüística Indoamericana, Centro de Investigaciones y Estudios Superiores en Antropología Social

(CIESAS), Mexico City, Mexico.

DiCanio, Christian, Jonathan D. Amith, Rey Castillo García. Forthcoming. The phonetics of moraic alignment in Yoloxóchitl Mixtec. Proceedings of Fourth International Symposium on Tonal Aspects of Languages, Nijmegen, The Netherlands, 13-16 May

DiCanio, Christian, Hosung Nam, Douglas H. Whalen, Jonathan D. Amith, and Rey Castillo García. Forthcoming. Vowel variability in elicited versus running speech: Evidence from Mixtec. Special issue on Stylistic Diversity of the Journal of Phonetics.

DiCanio, H. Timothy Bunnell, Hosung Ham, Douglas H. Whalen, Jonthan D. Amith, Rey Castillo García. 2013. Using automatic alignment to analyze endangered language data: Testing the viability of untrained alignment (senior co-author Christian DiCanio; other junior co-authors H. Timothy Bunnell, Rey Castillo Garcia, Hosung Nam, and Douglas H. Whalen). Journal of the Acoustical Society of America 134:2235–46.

DiCanio, H. Timothy Bunnell, Hosung Ham, Douglas H. Whalen, Jonthan D. Amith, Rey Castillo García. 2012. Assessing agreement level between forced alignment models with data from endangered language documentation corpora. Proceedings of INTERSPEECH, 2012. Portland, Oregon.

Section b: Works on Mixtec ethnobotany
de Ávila, Alejando. 2010. Mixtec plant nomenclature and classification. Ph.D. thesis, Department of Anthropology, University of California, Berkeley.

Casas, Alejandro. Juan Luis Viveros, and Juan Caballero. 1994. Etnobotánica mixteca: Sociedad, cultura y recursos naturales en la montaña de Guerrero. Mexico City: Instituto Nacional Indigenista.

Kuiper, H. Albertha, compilador. 2003. Ita, ku'u, yau, yua, yuku, yutnu, xi'i: Diccionario enciclopédico de plantas, mixteco de San Juan Diuxi y Santiago Tilantongo. Mexico City: Instituto Lingüístico de Verano.

Reyes Santiago, Panuncio Jerónimo. 1993. Estudio florístico y fitogeográfico en el municipio de San Juan Mixtepec, Distrito de Juxtlahuaca, Oaxaca. Tesis profesional. Universidad Nacional Autónoma de México. Escuela Nacial de Estudios Profesionales "Iztacala"

Amuzgo
Cuevas Suárez, Susana. 1985. Fonología generativa del amuzgo. Colección Científica 141, Serie Lingüística. México, D.F.: Instituto Nacional de Antropología e Historia.

Kim, Yuni. 2011. Algunas evidencias sobre representaciones tonales en amuzgo de San Pedro Amuzgos. Proceedings of CILLA V (http://www.ailla.utexas.org/site/cilla5/Kim_CILLA_V.pdf). Austin: University of Texas.

Smith-Stark, Thomas, and Fermín Librado Tapia García. 1984. Los tonos del amuzgo de San Pedro Amuzgos. Anales de Antropología 21(1): 199-220.

————. 2002. Amuzgo como lengua activa. In P. Levy (ed.), Del cora al maya yucateco: estudios lingüísticos sobre algunas lenguas indígenas mexicanas. Mexico City: UNAM.

Stewart, Cloyd & Ruth Stewart. 2000. Diccionario amuzgo de San Pedro Amuzgos, Oaxaca. Mexico City: SIL Mexico.

Tapia García, Fermín Librado. 1978. Etnobotánica de los amuzgos; parte 1: los árboles. Cuadernos de la Casa Chata 14. México, D.F.: Centro de Investigaciones Superiores del Instituto Nacional de Antropología e Historia.

————. 1980. Etnobotánica de los amuzgos; parte 2: los bejucos, zacates, yerbas y otras plantas. Cuadernos de la Casa Chata 28. México, D.F.: Centro de Investigaciones Superiores del Instituto Nacional de Antropología e Historia.

————. 1985. Las plantas curativas y su conocimiento entre los amuzgos: árboles grantes y arbustos. México, D.F.: Centro de Investigaciones y Estudios Superiores en Antropología Social.

————. 1999. Diccionario amuzgo-español: el amuzgo de San Pedro Amuzgos. Mexico City: Plaza y Valdés.

Huave

Cuturi, Flavia, and Maurizio Gnerre. 2005. Concomitance in Huave. En R. Beam de Azcona y M. Paster (eds.), Conference on Otomanguean and Oaxacan Languages, 37–58. [Survey of California and Other Indian Languages Report 13.] Berkeley, CA: SCOIL.

Cuturi, Flavia, and Maurizio Gnerre. In press. Wüx y ti-, dos adposiciones del ombeayiüts (huave de San Mateo del Mar): entre gramaticalizaciones y lexicalizaciones. En A. López Cruz y M. Swanton (eds.), Memorias del Coloquio María Fernández de Miranda.

Kim, Yuni. 2008. Topics in the phonology and morphology of San Francisco del Mar Huave. Ph.D. dissertation, University of California at Berkeley.

————. 2009. Alternancias causativas y estructura de eventos en el huave de San Francisco del Mar. Memorias de CILLA IV. Austin, TX: AILLA.

————. 2010. Phonological and morphological conditions on affix order in Huave. Morphology 20 (1): 133-163.

————. 2013. Estrategias de pasivización en la morfología verbal del huave de San Francisco del Mar. Amerindia 37: 274-298.

Noyer, Rolf. 2013. A generative phonology of San Mateo Huave. International Journal of American Linguistics 79(1): 1-60.

Stairs, Emily, and Elena Hollenbach. 1981. Gramática huave. En G. Stairs & E. Stairs (eds.), pp. 283-391.

Stairs, Glenn A., and Emily F. Stairs. (1981). Diccionario huave de San Mateo del Mar. Vocabularios indígenas 24. México: Instituto Lingüístico de Verano.

Suárez, Jorge. 1975. Estudios huaves. Colección Científica Lingüística 22. México, D.F.: INAH.

Q13 Ethical aspects of the project
Outline how you intend to handle ethical issues.

(Maximum 750 words)

Team leaders (Berez, Amith, Odango, Holton, Kim) will meet the oversight standards for human subjects research at their home institutions. Within the targeted community they are responsibility for addressing IRB concerns and presenting the project to the relevant authorities. Berez and Amith will oversee all ethical procedures and be responsible for consolidating IRB, community, and individual approvals and consent procedures for Oceania and Mexico, respectively.

Note that each researcher has extensive prior experience in documentation and a long-standing commitment to work in their respective communities where they have been researching native language and culture in these villages for some time. All individual native speaker participants who provide expertise and commentary, whether digitally recorded or not, will have the project explained in detail in their native language. Consent will be either recorded or written and signed, as the case permits. Those who record will be allow to set access standards to the materials and to change these in the future. Copies of all recorded material will be left with the community pending permission granted by the narrators. The focus of documentation is plant nomenclature, classification, and symbolic and economic use. Every effort will be made to ensure the intellectual property rights of the community, particularly regarding medicinal use of plants. Team leaders are responsible for working out community particular ethnical issues. All protocol decisions will be documented in detail in the metadata.

All senior researchers on the project consider attribution and intellectual property to be ethical concerns. For the purposes of the project we consider the languages in the recordings to be the intellectual property of the speaker(s) and throughout the project we will honor any requests for anonymity/non-anonymity. The annotated corpora are considered derivative works that will be attributed to the native speaker consultants and research team members that produced them. All participants will be credited in archival deposits and publications.

Collection of botanical voucher specimens involves proper procedures regarding national permit requirements and best practice procedures with receiving herbaria, in the host country and the USA. The Oceania project team has established

relationships with the Lae Herbarium in Lae, PNG; the Herbarium Bogoriense in Cibinong, Indonesia; and the Department of Agriculture in Chuuk State, FSM. David Lorence of the National Tropical Botanical Garden and Shelley James of the Bishop Museum are experts on Micronesian and Melanesian flora, respectively, and will serve as consultants to the project. The herbaria at these two institutions will receive duplicates of all voucher specimens for accession and determination. Holton has established contact with the Herbarium Bogoriense and will work closely with local botanists to collect and identify material from his study area. For Mexico, Silvia Salas, director of the SERO herbarium and project coordinator for the Sociedad para el Estudio de los Recursos Bióticos de Oaxaca (SERBO) is a project consultant. The SERO herbarium will receive and process all vouchers and extend the proper permits to researchers Amith and Kim. For Oceania and Mexico, when determination to species cannot be made at the local and host US herbaria the third duplicate will be sent to taxonomists specializing in the relevant families as "gifts for determination."

As with the recordings, an illustrated fieldguide in color will be deposited locally. Each guide will comprise (1) nomenclature, classification, and symbolic and economic use of each specimen; (2) the corresponding Western scientific name; (3) selected photographs of the plant in situ; (4) a brief narrative on plant use.

Finally, to ensure long-term preservation of precious and endangered language data, all materials (recordings, databases, photographs) will be properly archived in ELAR, Kaipuleohone University of Hawaiʻi Digital Language Archive, and the Archive of Indigenous Languages of Latin America in accordance with the conditions set by the speakers. Each community and local school will receive copies of this material in appropriate format (digital, printed, etc.)

In conclusion, ethical protocols will be followed for linguistic, cultural, and botanical field research. For the former IRB approvals will be processed at the researchers' host institutions; community authorities will be consulted and asked to consent to the research, establishing local priorities for deposit and dissemination; and the rights of native consultants and speakers will be addressed through documented informed consent procedures. Given that research team leaders have already established working relations in the target communities, the main focus will be on explaining the ethnobotanical facet of the documentation process. Finally, arrangements have been made to ensure that botanical specimens are collected with proper permits and that voucher deposits follow best practices for botanical research.

Q14 Project work plan
Provide a work plan to show the steps and timeline of the work that you will undertake in the project.

(Maximum 750 words)

Project organization will reduce costs by maximizing leverage among the six documentation subprojects, taking advantage of local contacts and ongoing research in the targeted areas of the five team leaders (Berez, Odango, Holton, Amith, and Kim), and having team members multitask. Three areas of savings are envisioned: (1) voucher specimens to be sent to specialists for determination to species will be bulked in Hawaiʻi (material from Micronesia, PNG, and Indonesia) and Oaxaca City (material from Huave, Amuzgo, and Guerrero Mixtec communities) saving processing and shipping costs to final destination taxonomists; (2) two flights to PNG (Berez) will be covered by other funds; and (3) often team leaders and senior team members will double as photographers, reducing travel, lodging, and per diem costs.

TEAM COMPOSITION
Each team comprises a senior researcher (SR), a botanical fieldworker (BOT), and a photographer (P). SR is responsible for project organization, local community liaison, recording and transcribing (or overseeing transcription). BOT is responsible for specimen collection, in-field processing, and field notes. P is responsible for high quality digital imagery and databasing images. P and SR will prepare illustrated fieldguides for local deposit. Many participants have multiple skills that make them particularly valuable team members. Native experts in local flora will provide recordings of traditional knowledge in language, building a corpus of digital recordings, and to develop databases of plant nomenclature, classification, and use. Other native experts will assist in transcription and translation. All the SRs are familiar with the languages of the targeted communities, ensuring highly accurate transcriptions.
Alor Archipelago, Indonesia: Holton (SR, P), BOT from Herbarium Bogoriense
Chuuk State, Micronesia: Odango (SR, P), BOT hired locally
Simbu Province, PNG: Berez (SR), Ilai (P and local community member), BOT from Lae Herbarium
Huave community, Oaxaca, Mexico: Kim (SR), Morales (P), BOT from SERBO Herbarium
Amuzgo community, Oaxaca, Mexico: Kim (SR), Morales (P), BOT from SERBO Herbarium
Coastal Guerrero Mixtec community, Yoloxóchitl, Guerrero, Mexico: Amith (SR, P), BOT from SERBO Herbarium

FIELDWORK PLAN
Travel to all six fieldsites will be scheduled to coincide with distinct flowering periods of local flora. Three 13-day trips are planned for Indonesia and PNG; two trips (one extended from early to late summer to reduce travel costs) are planned for Micronesia; four 10-day trips are planned to all Mexican sites (although Kim will combine trips to Huave and Amuzgo villages in each trip from England);.

Recordings, transcriptions, translations, metadata:
During fieldwork trips to each community digital recording of ethnobotanical knowledge will be combined with voucher collections. Priority will be given to obtaining high quality (in content and format) digital recordings from native experts chosen for their knowledge and narrative skills. Databases (XML markup) of plant nomenclature, classification, and use will be continually developed during fieldwork in all sites. . The goal is 27 hours of recording/language of which one-third will be transcribed (ELAN or Transcriber) and translated. The metadatabase will document the relationship between recordings, voucher specimens, and photographs, as well as other demographic and standard documentary metadata. All SRs are experts in best practices for digital language documentation.

Ethnobotany:
Teams will deposit one voucher specimen at the largest nearby herbarium (Herbarium Bogoriense, Indonesia; Lae Herbarium, PNG; the University of Guam Herbarium, Micronesia; SERBO herbarium in Oaxaca City, Mexico). The remaining two vouchers will be sent to US herbaria: in Hawai'i for Oceania collections (Bishop Museum, National Tropical Botanical Garden, and University of Hawai'i Herbarium), and to the Smithsonian national herbarium for Mexico. From the two "hubs" (Hawai'i and Washington) vouchers lacking determination to species will be sent to appropriate taxonomic experts as "gifts for determination." This is standard procedure: Amith has worked with over 100 taxonomists, specialists in distinct families, who will receive vouchers for determination. The consultants on this project for Oceania (Lorence, James, Conn) and botanists at national herbaria in Micronesia, PNG, and Indonesia, will recommend taxonomic specialists as needed.

Photography:
Each team is responsible for high quality digital images of all local flora collected in ethnobotanical research. Amith will conduct a three-day workshop to train the Oceania teams; he has already worked with and shared field photography methodology with Morales, who will be responsible for photographic documentation in the Huave and Amuzgo communities.

Timeline:
Each research team will be expected to complete approximately one-third of research goals (recordings, transcriptions, and translations; voucher specimens; plant nomenclature, classification and use; photographic records) per year. This will facilitate yearly deposit in ELAR and timely distribution of vouchers to taxonomic experts thus preventing backlogs in any facet of the project.

Q15 Financial details of support requested
All costs must be given in GBP; only eligible costs will be accepted. Use http://www.xe.com for exchange rates and indicate the date of conversion.

Round all costs in GBP to the nearest pound (e.g., £43.79 = £44).

Currency converted.
Please give the currency code as given at www.xe.com (e.g. Euro = EUR).

USD

Date of conversion (dd/mm/yyyy)

17/12/2014

Rate of conversion List the rate of conversion from your local currency to GBP.

0.641659

Q15a Replacement teaching costs
You may seek replacement teaching costs for yourself and/or those co-applicants who are in established posts and where

such support is necessary to enable you to undertake extended periods of fieldwork. You need to detail and justify claims made for such support.

Year 1

Year 2

Year 3

Justification for replacement teaching costs/research salaries
Provide details of the basis for calculating the above replacement teaching/salary costs, their justification and the length and location of your related field trips. Official rates of pay should be used, as a comparison with the level of cost requested. You are permitted to include a reasonable estimate for annual inflation increases, please list.

None.

15b Research staff costs
Specify here the total number of hours you plan to work with your research staff. You should cost these hours of work at the appropriate hourly or daily rate for the location where the staff will work. Include names, where known. You may be asked to provide evidence of the relevant pay scale(s) or hourly rate(s) used.

Year 1

Name of research staff	Salary/hourly rate and time on the project	Local currency code	Total (local currency)	Total (GBP)
Barry Conn		USD	250	£160.00
Silvia Salas (taxonomy specialist)		USD	1000	£642.00
Botanist in Mexico	50% FTE ($500/mo)	USD	6000	£3850.00
Botanist in PNG		USD	850	£545.00
Botanist in Indonesia		USD	900	£578.00
Botanist in Micronesia		USD	1500	£963.00
Shelley James		USD	250	£160.00
Jonathan Amith		USD	3000	£1925.00
			Total:	£8823.00

Year 2

Name of research staff	Salary/hourly rate and time on the project	Local currency code	Total (local currency)	Total (GBP)
Barry Conn		USD	250	£160.00

Name of research staff		Local currency code	Total (local currency)	Total (GBP)
Silvia Salas (taxonomy specialist)		USD	1000	£642.00
Botanist in Mexico	50% FTE ($500/mo)	USD	6000	£3850.00
Botanist in PNG		USD	850	£545.00
Botanist in Indonesia		USD	900	£578.00
Shelley James		USD	250	£160.00
Jonathan Amith		USD	3000	£1925.00
			Total:	£7860.00

Year 3

Name of research staff	Salary/hourly rate and time on the project	Local currency code	Total (local currency)	Total (GBP)
Barry Conn		USD	250	£160.00
Silvia Salas (taxonomy specialist)		USD	1000	£642.00
Botanist in Mexico	50% FTE ($500/mo)	USD	6000	£3850.00
Botanist in PNG		USD	850	£545.00
Botanist in Indonesia		USD	900	£578.00
Botanist in Micronesia		USD	1500	£963.00
Shelley James		USD	250	£160.00
Jonathan Amith		USD	3000	£1925.00
			Total:	£8823.00

Justification for research staff costs
Summarise here the duties of each of the research staff listed, their roles, responsibilities, and why they are necessary for your project.

Amith: Head of Mesoamerican teams. Total over project of 40 days of fieldwork, 30 days of post-fieldwork processing and organization of materials; 6 days/year coordinating Mexican projects. Total is 88 days over 3 years or 12% FTE

Consultants: Conn, James, Salas: taxonomy and botany specialists for PNG and Mexico, honorarium budgeted at $125/day.

Botanists in PNG, Indonesia and Micronesia: budgeted at $50/day for Indonesia and PNG; $100/day for Micronesia. For all identification work.

The following personnel will be contributing the following time without funding from ELDP:

Berez: Total over project of 40 days of fieldwork, 30 days of post-fieldwork processing and organization of materials; 6 days/year coordinating Oceania projects. Total is 88 days over 3 years or 12% FTE

Other project leaders (Holton, Odango, Kim) will dedicate approximately 40 days of fieldwork and 30 days of post-fieldwork processing and organization of materials for each language studied; this represents approximately 9% of

FTE (note that as Kim will study both Huave and Amuzgo ethnobotany her time commitment will be 140 days over three years)

15c Technical staff

Specify here the total number of hours you plan to work with your technical staff. You should cost these hours of work at the appropriate hourly or daily rate for the location where the staff will work. Include names, where known.

Year 1

Technical staff	Local currency code	Total (local currency)	Total (GBP)
Photographer in Indonesia	USD	2400	£1540.00
Photographer in Micronesia	USD	2400	£1540.00
Photographer in PNG (Bafinuc Ilai)	USD	2400	£1540.00
Photographer in Mexico	USD	9000	£5776.00
		Total:	£10396.00

Year 2

Technical staff	Local currency code	Total (local currency)	Total (GBP)
Photographer in Micronesia	USD	2400	£1540.00
Photographer in Indonesia	USD	2400	£1540.00
Photographer in PNG (Bafinuc Ilai)	USD	2400	£1540.00
Photographer in Mexico	USD	9000	£5776.00
		Total:	£10396.00

Year 3

Technical staff	Local currency code	Total (local currency)	Total (GBP)
Photographer in Indonesia	USD	2400	£1540.00
Photographer in Micronesia	USD	2400	£1540.00
Photographer in PNG (Bafinuc Ilai)	USD	2400	£1540.00
Photographer in Mexico	USD	4500	£2887.00
		Total:	£7507.00

Justification for technical staff costs

Summarise here the duties of the technical staff, their roles, responsibilities, and why they are necessary for your project.

Skilled, trained photographers are necessary to photograph the botanical specimens for the database and for identification purposes. Amith with train the photographers in the techniques he has developed. Technical staff costs are based on local rates:

Oceania:
For the three Oceania locations (PNG, Micronesia, Indonesia) we are budgeting USD2400/year for photography. These rates are standard for skilled technical assistance in the region.

Mexico: For the three Mexico locations we are budgeting USD9000/year in years 1 and 2, and USD4500 in year 3. These rates are based on Amith's previous experience.

15d Administrative staff

Specify here the total number of hours you plan to work with administrative staff. You should cost these hours of work at the appropriate hourly or daily rate for the location where you will be doing your research. Indicate how you have calculated this pay rate. You may be asked to provide evidence of the relevant pay scale(s) or hourly rate(s) used. Include names of the staff if known.

Year 1

Year 2

Year 3

Justification for administrative staff costs

Summarise here the duties of the administrative staff, and their roles in the project.

None.

15e Student stipend

The stipend is to cover the living cost of students at the host institution. Ineligible categories of costs are: tuition fees, other administrative costs at the host institution, extra income to cover income tax.

Year 1

Year 2

Stipend	Local currency code	Total (local currency)	Total (GBP)
Fringe for UH graduate assistant	USD	1674	£1074.00
Student stipend for UH graduate assistant	USD	9843	£6315.00
		Total:	£7389.00

Year 3

Stipend	Local currency code	Total (local currency)	Total (GBP)
Fringe for UH graduate assistant	USD	1674	£1074.00
Student stipend for UH graduate assistant	USD	9843	£6315.00
		Total:	£7389.00

Justification

Provide breakdown of your stipend costs.

> A graduate assistant is requested in Years 2 and 3 to help process all the collected data for deposit into ELAR. We are calculating 10 hours per week at a standard U Hawaii rate of USD9843 for stipend plus USD1674 for fringe for both years.

Q15f Language consultants

Specify here the total number of hours you plan to work with language speaker consultants. You should cost these hours of work at the appropriate hourly or daily rate for the location where you will be doing your research. Indicate how you have calculated this pay rate. Include names of the consultants if known. If you compensate your language consultants by other means (e.g., gifts, food), please explain the type and the cost of the compensation.

Year 1

Language consultants	Local currency code	Total (local currency)	Total (GBP)
Transcription/translation assistants: Mexico	USD	2400	£1540.00
Field consultants: Mexico	USD	2000	£1283.00
Transcription/translation assistants: Indonesia	USD	600	£385.00
Field consultants: Indonesia	USD	585	£375.00
Transcription/translation assistants: Micronesia	USD	1800	£1155.00
Field consultants: Micronesia	USD	2000	£1283.00
Transcription/translation assistants: PNG	USD	960	£616.00
Field consultants: PNG	USD	1300	£834.00
		Total:	£7471.00

Year 2

Language consultants	Local currency code	Total (local currency)	Total (GBP)
Transcription/translation assistants: Mexico	USD	2400	£1540.00
Field consultants: Mexico	USD	2000	£1283.00
Transcription/translation assistants: Indonesia	USD	600	£385.00
Field consultants: Indonesia	USD	585	£375.00

Transcription/translation assistants: PNG	USD	960	£616.00
Field consultants: PNG	USD	1300	£834.00
		Total:	£5033.00

Year 3

Language consultants	Local currency code	Total (local currency)	Total (GBP)
Transcription/translation assistants: Mexico	USD	2400	£1540.00
Field consultants: Mexico	USD	3000	£1925.00
Transcription/translation assistants: Indonesia	USD	600	£385.00
Field consultants: Indonesia	USD	585	£375.00
Transcription/translation assistants: Micronesia	USD	1800	£1155.00
Field consultants: Micronesia	USD	1900	£1219.00
Transcription/translation assistants: PNG	USD	960	£616.00
Field consultants: PNG	USD	1300	£834.00
		Total:	£8049.00

Justification for language consultants costs
Summarise here the duties of the language consultants, and their roles in the project.

FIELD CONSULTANTS: These are individuals who will provide recordings of ethnobotanical knowledge in the local language. Rates are calculated as follows:

PNG: $100/day for 3 consultants, 13 days/year in field.
Micronesia: $100/day for 3 consultants, 13 days/year in field.
Indonesia: $45/day for 3 consultants, 13 days/year in field.
Mexico: $100/day for 3 consultants, 10 days/year in field.

TRANSCRIPTION/TRANSLATION ASSISTANTS: These individuals will transcribe and translate recordings for the project, 3 hours/language/year (total of 54 hours of transcribed/translated recordings out of 162 hours of recordings for the project). Rates are calculated as follows:

PNG: 240 hours labor/year at $4/hour
Micronesia: 240 hours labor/year at $8/hour
Indonesia: 240 hours labor/year = 1.5 months at $400/month
Mexico: 360 hours labor/year at $6.67/hour

Q15g Equipment
You may apply for equipment to be used for your project. Provide specific details of the equipment you plan to purchase and its cost. Indicate how you calculated the cost(s) (see guidance notes in the information pack).

Year 1

Specification	Quantity	Local currency code	Total (local currency)	Total (GBP)
Specimen dryer	6	USD	700	£449.00
Drying supplies: corrugated cardboard, newspaper, boxes)	6	USD	700	£449.00
Plants presses, poles, clippers, other collecting supplies	6	USD	1400	£898.00
Camera setups	4	USD	6040	£3875.00
Compact flash	2	USD	100	£64.00
Eneloop 8 AA batteries charger	2	USD	340	£218.00
Shure SM10a microphone	4	USD	500	£321.00
Marantz PMD 671 or equivalent	1	USD	1800	£1155.00
			Total:	£7429.00

Year 2

Year 3

Justification for equipment costs

Provide full justification for all your equipment and its role in meeting your project's goals. Also list here other equipment that you will be using on the project, which is not included in your budget proposal.

AUDIO RECORDING SUPPLIES:
Marantz PMD 671 or equivalent: 1 needed. $1800.
Sure SM10a microphones: 4 needed. $125/each.
AA Rechargeable batteries and chargers: 2 sets needed. $170/each.
Compact flash storage cards: 2 needed. $50/each.

BOTANICAL COLLECTION SUPPLIES:
Specimen dryers: one for each of 6 fieldsites, $117/each.
Drying supplies: one kit for each of 6 fieldsites, $117/each.
Collecting supplies (presses, poles, clippers): one kit for each of 6 fieldsites: $233/each.

PHOTOGRAPHY SUPPLIES:
Lens, Macro 100mm: 4 needed. $500/each.
Extra camera battery: 4 needed. $60/each.
Glide rail: 4 needed. $100/each.
Machined photographic equipment for macro photography: 4 needed. $200/each.
Speedlites: 4 needed. $500/each.
Flash diffusers: 4 needed. $150/each.

SUPPLIES BEING DONATED TO PROJECT BY PARTICIPANTS:
6 cameras, Canon EOs 60D or equivalent
6 lenses, prime or zoon
Camera media cards
6 tripods
6 tripod heads
5 sets of high-quality audio recorders with microphones, batteries, storage cards

Q15h Travel and subsistence
You may apply for the cost of travel and subsistence for fieldwork. Provide specific details of your travel and subsistence costs

Year 1

Travel and subsistence	Local currency code	Total (local currency)	Total (GBP)
Subsistence in Mexico	USD	4983	£3196.00
Subsistence in Indonesia	USD	800	£513.00
Subsistence in Micronesia	USD	2200	£1411.00
Subsistence in PNG	USD	1400	£898.00
In-country travel in Mexico	USD	1817	£1166.00
International travel to Mexico	USD	1750	£1123.00
In-country travel in Indonesia	USD	1000	£642.00
International travel to Indonesia	USD	3000	£1925.00
In-country travel in Micronesia	USD	840	£539.00
International travel to Micronesia	USD	3000	£1925.00
Amith to visit Honolulu for training workshop	USD	2000	£1283.00
		Total:	£14621.00

Year 2

Travel and subsistence	Local currency code	Total (local currency)	Total (GBP)
Subsistence in Mexico	USD	4983	£3196.00
Subsistence in Indonesia	USD	800	£513.00
Subsistence in PNG	USD	1400	£898.00
In-country travel in Mexico	USD	1817	£1166.00
International travel to Mexico	USD	1750	£1123.00
In-country travel in Indonesia	USD	1000	£642.00
International travel to Indonesia	USD	3000	£1925.00
		Total:	£9463.00

Year 3

Travel and subsistence	Local currency code	Total (local currency)	Total (GBP)
Subsistence in Mexico	USD	4983	£3197.00
Subsistence in Indonesia	USD	800	£513.00
Subsistence in Micronesia	USD	2000	£1283.00
Subsistence in PNG	USD	1400	£898.00
In-country travel in Mexico	USD	1817	£1166.00
International travel to Mexico	USD	2750	£1765.00
In-country travel in Indonesia	USD	1000	£642.00
International travel to Indonesia	USD	3000	£1925.00
In-country travel in Micronesia	USD	840	£539.00
International travel to Micronesia	USD	3000	£1925.00
In-country travel in PNG	USD	250	£160.00
International travel to PNG	USD	3000	£1925.00
		Total:	£15938.00

Justification for travel and subsistence costs
Provide full justification for all your travel and subsistence costs.

PNG TRAVEL:
1. International travel (Berez): Years 1 and 2 are already paid for by Berez's current ELDP grant. International travel HNL-POM return calculated at $3000 for year 3.
2. In-country travel (Berez): Years 1 and 2 are already paid for by Berez's current ELDP grant. Calculated at $250 for year 3.
3. Subsistence in PNG (Berez, botanist): room and board calculated at $350/week. No subsistence is needed for the PNG photographer Bafinuc Ilai, who resides in the village.

MICRONESIA TRAVEL:
1. International travel (Odango): $3000 HNL to Chuuk, Years 1 and 3 only.
2. In-country travel (Odango, botanist): Chuuk to Nomnomweite, $420/pp. Years 1 and 3 only.
3. Subsistence in Micronesia (Odango, botanist): $1000 week in Year 1, $1000/week in year 3.

INDONESIA TRAVEL:
1. International travel (Holton): $3000 round trip from Fairbanks, Alaska.
2. In-country travel (Holton, botanist): $500 per person.
3. Subsistence (Holton, botanist): $400/week per person.

MEXICO TRAVEL:
1. International travel (Amith, Kim): $1000 for Amith in Year 3 only (years 1 and 2 covered by current ELDP grant). $1750 for Kim from United Kingdom.
2. In-country travel (Amith, Kim,

Q15i Consumables
You may apply for the cost of consumables (e.g. recording media, postage, communications, paper, fuel for vehicles or generators) directly associated with the project (see guidance notes in the information pack).

Year 1

Consumables	Local currency code	Total (local currency)	Total (GBP)
Shipping of specimens x6	USD	1166	£748.00
Consumables (fuel, notebooks, mobile phone credits)	USD	366	£235.00
		Total:	£983.00

Year 2

Consumables	Local currency code	Total (local currency)	Total (GBP)
Shipping of specimens x6	USD	1166	£748.00
Consumables (fuel, notebooks, mobile phone credits)	USD	367	£235.00
		Total:	£983.00

Year 3

Consumables	Local currency code	Total (local currency)	Total (GBP)
Shipping of specimens x6	USD	1168	£749.00
Consumables (fuel, notebooks, mobile phone credits)	USD	367	£235.00
		Total:	£984.00

Justification for consumables costs
Provide details of the basis for calculating the above consumables costs.

Q15f Other costs
Other costs, as permitted by the guidelines in the information pack.

Year 1

Itemised expenditure	Local currency code	Total (local currency)	Total (GBP)
Processing of specimens at NTBG, Microniesia	USD	750	£481.00
		Total:	£481.00

Year 2

Year 3

Itemised expenditure	Local currency code	Total (local currency)	Total (GBP)
$500/community for producing local materials on ethnobotany	USD	3000	£1925.00
Processing of specimens at NTBG, Micronesia	USD	750	£481.00
		Total:	£2406.00

Justification for "Other" costs
Provide details of the basis for calculating the above "Other" costs.

The figures here are automatically calculated from the breakdown of costs you have provided above

	Budget Item	Year One	Year Two	Year Three	Total (GBP)
15a	Replacement teaching	0	0	0	0
15b	Research staff	8823	7860	8823	25506
15c	Technical Staff	10396	10396	7507	28299
15d	Administrative staff	0	0	0	0
15e	Student Stipend	0	7389	7389	14778
15f	Language Consultants	7471	5033	8049	20553
15g	Equipment	7429	0	0	7429
15h	Travel and subsistence	14621	9463	15938	40022
15i	Consumables	983	983	984	2950
15j	Other	481	0	2406	2887
Total		50204	41124	51096	142424

Q16 Graduate studentship details
Provide details of students whose stipend costs you are applying for.

Student 1
Name of graduate student to be supported by the grant (if known)

Details of any funding for postgraduate study

Institution and department where registered

Nature and scope of dissertation

Date registered for postgraduate study (dd/mm/yy)

Proposed submission date of dissertation (dd/mm/yy)

Supervisor's title, full name and department

Supervisor's comments: *Please comment briefly on the student's qualifications and experience*

Student 2
Name of graduate student to be supported by the grant (if known)

Details of any funding for postgraduate study

Institution and department where registered

Nature and scope of dissertation

Date registered for postgraduate study (dd/mm/yy)

Proposed submission date of dissertation (dd/mm/yy)

Supervisor's title, full name and department

Supervisor's comments: *Please comment briefly on the student's qualifications and experience*

Q17 Referees
Supply full contact details of two referees who will write in support of your application. Ensure that your referees have received the ELDP email with their login and that they have agreed to submit their references the deadline.

Referee details (1)

Referee title

Referee name

Lyle Cambell

Referee position

Professor

Referee address

University of Hawaii Department of Linguistics
1890 East West Road
Honolulu HI 96822 USA

Country

United States

Referee phone number

+1 (808) 956-3242

Referee email (ensure that your referee has received the ELDP email with the login information)

lylecamp@hawaii.edu

Why have you chosen this referee?

Dr. Campbell is familiar with language documentation especially in Mesoamerica and can situate this project in the University of Hawaii's Biocultural Research Initiative.

Referee details (2)

Referee title

Referee name

Referee position

Referee address

Country

Referee phone number

Referee email (ensure that your referee has received the ELDP email with the login information)

Why have you chosen this referee?

Q18 Curriculum Vitae
Title

Dr

First name

Andrea

Family name

Berez

Nationality

US

Title of current post or study

Assistant Professor of Linguistics

Date of appointment or registration

01/07/2011

Name of employer or place of study

University of Hawaii at Manoa

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
2011	PhD	Linguistics	University of California, Santa Barbara
2006	MA	Linguistics	Wayne State University
1994	BFA	Sculpture	University of Michigan

Employment
List your last 3 positions.

Date	Position	Employer
N/A		

List any publications or presentations relevant to your proposal

To appear. Berez, Andrea L. Linguistic fieldwork. In James D. Wright (ed.), The International Encyclopedia of Social and Behavioral Sciences, 2nd ed. Elsevier.

To appear. Gries, Stefan Th. & Andrea L. Berez. Annotation in/for corpus linguistics. In Nancy Ide & James Pustejovsky (eds.), Handbook of linguistic annotation. Berlin: Springer Verlag.

2014. Berez, Andrea L. Two examples of digital archiving of endangered language oral traditions: Kaipuleohone at the University of Hawai'i and C'ek'aedi Hwnax in Alaska. Oral Tradition 28(2).

2013. Bird, Steven, David Chiang, Friedel Frowein, Andrea L. Berez, Mark Eby, Florian Hanke, Ryan Shelby, Ashish Vaswani, & Ada Wan. The International Workshop on Language Preservation: An experiment in text collection and language technology. Language Documentation & Conservation 7: 155-167.

2012. Thieberger, Nicholas and Andrea L. Berez. Linguistic data management. In Nicholas Thieberger (ed.), The Oxford Handbook of Linguistic Fieldwork, 90-118. Oxford: Oxford University Press

2012. Berez, Andrea L., Tana Finnesand and Karen Linnell. C'ek'aedi Hwnax, the Ahtna Regional Linguistic and Ethnographic Archive. Language Documentation & Conservation 6: 256-251.

2012. Multiple presentations on aspects of Language Documentation at the First International Workshop on Language Documentation, University of Goroka, PNG.

2011. Discourse, landscape, and directional reference in Ahtna. UC Santa Barbara PhD Dissertation.

2011. Berez, Andrea L. Intonation as a genre distinguishing feature in Ahtna: A quantitative approach. Functions of Language 18(2): 210-236.

2010. Berez, Andrea L. & Stefan Th. Gries. Correlates to middle marking in Dena'ina iterative verbs. International Journal of American Linguistics 76(1): 145-165.

2007. Kari, James and Andrea L. Berez (eds.). Inland Dena'ina Keywords: Lime Village Dialect, by Helen Dick. Anchorage: Alaska Native Heritage Center.

2006. Berez, Andrea L. and Gary Holton. Finding the locus of best practice: Technology training in an Alaskan language community. In Linda Barwick and Nicholas Thieberger (eds.), Sustainable Data From Digital Sources: From Creation to Archive and Back, 69-86. Sydney: Sydney University Press.

2006. Holton, Gary, Andrea L. Berez and Sadie Williams. Building the Dena'ina language archive. In Laurel Evelyn Dyson, Max Hendricks and Stephen Grant (eds.), Information Technology and Indigenous People, 205-209. Hershey, PA: Idea Group.

Plus, many presentations on various aspects of technology in language documentation, Athabascan linguistics, discourse. For more information see complete CV at http://www2.hawaii.edu/~aberez/cv.html.

List any previous fieldwork experience

-Kere (Chimbu-Waghi), Papua New Guinea, 2013-present
-Kuman (Chimbu-Waghi), field methods course (as instructor), 2011-12;? Papua New Guinea 2012, 2013;? in Hawai'i, 2012-present.
-Ahtna (Athabascan), Alaska, 2007, 2008, 2009, 2010. -Deg Xinag (Athabascan), Alaska. 2009, 2010. -Dena'ina (Athabascan), Alaska, 2005, 2006, 2007. -Kannada (Dravidian), California. 2007, 2008.
-Khalkha Mongolian, field methods course, 2006-7. -Ottawa (Algonquian), field methods course, 2004.

List any other significant awards, exhibitions or achievements relevant to this application

RELEVANT GRANT:
2012. University of Hawai'i at Ma?noa Research Council, Technology, Innovation, and Society Grant: "Pilot project to assess the impact of language documentation technologies in Papua New Guinea: Perspectives from family, village, and university." $12,700.
ARCHIVED DOCUMENTARY COLLECTIONS:
-Ahtna (Athabascan, Alaska). PARADISEC. http://catalog.paradisec.org.au/collections/ALB01
-Chimbu-Waghi Languages (PNG). Kaipuleohone: http://search.language-archives.org/search.html?

fq=archive_facet%3A%22Kaipuleohone%22%20AND%20contributor_facet%3A%22Berez%2C%20Andrea%20L.%22

ARCHIVE ADMIN. EXPERIENCE:

-2011-present: Director, Kaipuleohone University of Hawaii Digital Language Archive (member of OLAC). -2009-present: Consultant, C'ek'aedi Hwnax Ahtna Regional Ethnographic Archive (Alaska;? member of OLAC). -2013-present: Board of Directors, Digital Endangered Languages and Music Archives Network (DELAMAN).

RELEVANT UNIVERSITY TEACHING

-University of Hawaii at Manoa:

LING 680: Intro to Language Documentation (Fall 2012, Fall 2013)

LING 710: Methods in Langauge Documentation (Spring 2012, Spring 2013, Spring 2014) LING 680: Field Methods (Kuman language)

RELEVANT COMMUNITY-BASED TEACHING

-Ahtna Breath of Life, Alaska (2013)

-First International Workshop on Language Documentation (with Steven Bird), University of Goroka, PNG (2012)

-Canadian Indigenous Languages and Literacy Development Institute, University of Alberta: Morphosyntax (2011), Community Archiving (2012, 2014), Techniques for Endangered Language Documentation (2014)

-Institute for Field Linguistics and Language Documentation (InField): ELAN 1 and 2 (2008, 2010), Databases for Language Documentation (2010)

-Multiple workshops on ELAN and other aspects of language documentation in the following language communities and locations: Mojave;? Ahtna;? Dena'ina;? University of Toronto Centre for Aboriginal Initiatives;? 2nd International Conference on Language Documentation & Conservation

RELEVANT SERVICE

-2011-present: Technology editor for Language Documentation & Conservation (journal)

-2013, 2015: Co-chair, 3rd and 4th International Conference on Language Documentation & Conservation

Additional CV for co-applicant

Title

Dr

First name

Jonathan

Family name

Amith

Nationality

US

Title of current post or study

Independent Scholar: ; Research Affiliate Department of Anthropology, Gettysburg College; Research Affiliate Department of Anthropology, National Museum of Natural History, Smithsonian Institution

Date of appointment or registration

Amith has been an independent scholar since graduating with a PhD in anthropology from Yale in 2000

Name of employer or place of study

Independent scholar: Office at Gettysburg College

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
2000	PhD	Anthropology	Yale
1978	BA	General Studies	University of Michigan

Employment
List your last 3 positions.

Date	Position	Employer
2000-present	Independent scholar working on language documentation	Soft money: Grants from various foundations and agencies including NSF, Ford Foundation, National Endowment for the Humanities, ELDP
2007-8	Visiting Assistant Professor, Department of Linguistics, University of Chicago	University of Chicago

List any publications or presentations relevant to you proposal for this additional cv

The following are publications and presentations that derive from language documentation efforts in Indigenous languages of Mexico other than that targeted in this project. In general they demonstrate relevant productivity on description and documentation of endangered languages. More specifically, in the case of the books Ok nemi totlahto:l and the documentary "Silvestre Pantaleon", the products also demonstrate Amith's involvement in questions of indigenous literacy, education and outreach. The Amate Tradition, on the other hand, demonstrates a strong social commitment, in this case to the opposition of Indigenous activists to the construction of a hydroelectric dam that would have innundated 22 villages.

Publications: Books

Amith, Jonathan D., ed., 2009. Ok nemi totlahto:l, vol. 1. Estado de Guerrero: San Agustin Oapan, Ameyaltepec, San Francisco Ozomatlan. Mexico City: Instituto Nacional de Lenguas Indigenas. [6-CD set of digitally recorded stories from 3 villages in the Balsas River valley accompanied by a short grammatical sketch and monolingual transcriptions. A total of 10,000 copies of the book/CD-set were produced by the Mexican government for free distribution to Nahuatl-speaking schools and communities]

Amith, Jonathan D., ed., 1995. The Amate Tradition: Innovation and Dissent in Mexican Art. Chicago: Mexican Fine Arts Center Museum; Mexico City: La Casa de las Imagenes [distributed by University of New Mexico Press] Awarded special recognition for the category non–black-and-white book by the Union de Industriales Litografos de México, A.C. [This book, an enhanced exhibition catalogue, grew out of Amiths's efforts to work with Indigenous activiists in opposition
to the construction of a hydroelectric dam that would have innundated 22 villages in the Balsas River Valley]

Documentary film:

2011 Silvestre Pantaleon. Documentary in Nahuatl with English and Spanish subtitles. Jonathan D Amith (producer, codirector), Roberto Olivares (director). 65 mins.

Publications: Articles (including under review)

DiCanio, Christian, Jonathan D. Amith, H. Timothy Bunnell, Rey Castillo Garcia, Hosung Nam, and Douglas H. Whalen, (under review). "Using automatic alignment to analyze endangered language data: Testing the viability of untrained alignment." Under review by the Journal of the Acoustic Society of America.

DiCanio, Christian, Jonathan D. Amith, H. Timothy Bunnell, Rey Castillo Garcia, Hosung Nam, and Douglas H. Whalen. 2012. "Assessing agreement level between forced alignment models with data from endangered language documentation corpora. Proceedings of INTERSPEECH," 2012. Portland, Oregon.

Maxwell, Michael, and Jonathan D. Amith. 2010. "Language Documentation: Archiving Grammars." Chicago Linguistic Society, vol. 45.

Guion, Susan G., Jonathan D. Amith, Christopher S. Doty, and Irina A. Shport. 2010. "Word-level prosody in Balsas Nahuatl: The origin, development, and acoustic correlates of tone in a stress accent language". Journal of Phonetics 38:137–66.

Guion, Susan G., and Jonathan D. Amith. 2005. "The effect of [h] on tonal development in Nahuatl." Journal of the Acoustical Society of America 117, S2490 [abstract of contributed poster]

Maxwell, Michael, and Jonathan D. Amith. 2005. "Language documentation: The Nahuatl grammar." In Computational Linguistics and Intelligent Text Processing: 6th International Conference, CICLing2005, Mexico City, Mexico, February 13–19, 2005. Proceedings, ed. Alexander Gelbukh. Berlin: Springer, pp. 474–85.

Amith, Jonathan D. 2002. "What's in a word? The why's and what for's of a Nahuatl dictionary." In Dictionaries of Indigenous Languages of the Americas, eds. William Frawley, Kenneth Hill, and Pamela Munro. Berkeley: University of California Press, pp. 219–58.

Amith, Jonathan D., and Thomas Smith-Stark. 1994a. "Transitive nouns and split possessive paradigms in Central Guerrero Nahuatl." International Journal of American Linguistics 60: 342–68.

----- 1994b. "Predicate nominal and transitive verbal expressions of interpersonal relations." Linguistics 32: 511–47.

Presentations:

Feb. 2013. Invited lecture: Language Documentation and Natural History: A Synergistic and Interdisciplinary Approach to Ethnobiology". 3rd International Conference on Language Documentation and Conservation (ICLDC), "Sharing Worlds of Knowledge," University of Hawaii, February 28-March 3, 2013.

5 Jan. 2013. Christian DiCanio, Jonathan D. Amith,, H. Timothy Bunnell, Rey Castillo Garcia, Hosung Nam, and Douglas H. Whalen. "Automatic Alignment in Yoloxochitl Mixtec documentation." Paper presented at the Society for the Study of Indigenous Lanugages of the Americas, Linguistic Society of America Meetings, Boston, Mass., 3 to 6 January 2013.

21 April 2012. Jonathan D. Amith. "La lexicografia en la documentacion de lenguas amenazadas: El desarrollo de un diccionario del mixteco de Yoloxochitl, Guerrero." Paper presented at the Coloquio sobre Lenguas Otomangues y Vecinas, Oaxaca City, Oaxaca, México, 20 to 22 April.

6 January 2012. Christian DiCanio (presenter), Jonathan D. Amith, Rey Castillo Garcia. "Phonetic alignment in Yoloxochitl Mixtec tone." Paper presented at the Society for the Study of Indigenous Languages of the Americas, Linguistic Society of America Meetings, Portland, Oregon.

6 January 2011. Jonathan D. Amith. "Meeting the scientific responsibilities of documentation efforts: Lessons from three NSF-DEL projects." Linguistic Society of America Annual Meeting, Pittsburgh, Pennsylvania, 6–8 January 2011.

17 April 2010. Jonathan D. Amith. "El enfoque linguistico en la etnobiologia: La importancia de una metodologia interdisciplinaria. Invited plenary presentation, Coloquio Thomas C. Smith Stark sobre Lenguas Otomangués y Vecinas IV. Oaxaca, Oaxaca, 16–18 abril 2010.

1 May 2009 . Jonathan D. Amith. "The practice and politics of Nahuatl standardization: Local and national identity in conflict." Invited presentation, University of Maryland, College Park.

2 August 2007. Jonathan D. Amith. "La linguistica del nahuatl en Guerrero: Documentacion y revitalizacion por medio del trabajo comunitario y la tecnologia." Invited presentation, Catedra Ignacio Manuel Altamirano. Invited lecture.

Instituto Nacional de Antropologie e Historia and the Museo Regional, Chilpancingo, Guerrero.
10 April 2007. Jonathan D. Amith. "The Life and Death of a Language: Aztec from Conquest to the Present." Invited lecture, Department of Anthropology and Center for Latin American Studies, James Madison University.

Dec. 4, 2005. Jonathan D. Amith. "The Impracticality of Practical Orthography: The Impracticality of Practical

Orthography: Language At the Interface of Documentation and Pedagogy." Paper presented at Session "New Writing Systems" at the 104th Annual Meeting of the American Anthropological Association, Washington DC, 30 November–4 December.

Oct. 28, 2005. Jonathan D. Amith. "Language processing and presentation tools for work in endangered languages". Invited talk at the Conference on Indigenous Languages of Latin America; Austin, Texas, 27–29 Oct. 2005.

June 17, 2005. Susan G. Guion and Jonathan D. Amith. "The Historical Development of Word Prosody in Balsas Nahuatl: The Effects of *h."" Paper presented at the Between Stress and Tone (BEST) Conference, Leiden, The Netherlands, 16–18 June 2005.

May 18, 2005. Susan G. Guion and Jonathan D. Amith. "The Effect of [h] on Tonal Development in Nahuatl." Poster presentation at the 143rd meeting of the Acoustical Society of America, Vancouver, British Columbia, 14–20 May.

Feb. 14, 2005. Michael Maxwell and Jonathan D. Amith. "Language Documentation: The Nahuatl Grammar." Presented at the Sixth International Conference on Intelligent Text Processing and Computational Linguistics (CICLing), Mexico City.

Nov. 17, 2004. Jonathan D. Amith. Invited lecture: "Nahuatl Learning Environment: Lexicon, Grammar, Encyclopedia." University of Chicago, Language Laboratories and Archives.

Sept. 6, 2004. Jonathan D. Amith. "Invited lecture: Textos, lexico y gramatica nahuatl. Un proyecto para integrar el estudio y aprendizaje de lenguas amenazadas." Seminario de Tipologia de las Lenguas Indigenas Americanas, Direccion de Linguistica, Instituto Nacional de Antropologia e Historia, Mexico City.

Dec. 12, 2000. Jonathan D. Amith. Chair and organizer of panel: Legal, Ethical, and Policy Issues Concerning the Recording and Publication of Primary Language Material Workshop on Web-Based Language Documentation and Description, Institute for Research in Cognitive Science, University of Pennsylvania, Philadelphia, 12–15 Dec. 2000.

Nov. 15, 2000. Jonathan D. Amith. "Pitch accent, vowel length, and tone in San Agustin Oapan Nahuatl". American Anthropological Association Meetings, 15–19 Nov. 2000, San Francisco.

List any previous fieldwork experience for this additional cv

2009-present
Cuetzalan, Puebla [approximately 6 weeks each summer: 2009, 2010, 2011, 2012]
Work with two native speakers: training in language documentation methodology, including lexicography, and thedevelopment of a large dictionary on the Nahuat language spoken in this municipality.

2009-present
Yoloxóchitl, Guerrero [approximately 3 to 4 weeks/year in 2010, 2011, 2012]
Documentation (phonetics, corpus development, lexicography, grammatical description) of the Mixtec spoken in this community

2006–ongoing
San Agustín Oapan, Guerrero [approximately 2 months/year]
San Agustín Oapan and other Nahuatl-speaking communities: Language documentation (mostly digital recordings and transcriptions; phonetic research)

2006
San Agustín Oapan [January: 1 month ethnobotanical research]
San Agustín Oapan [1 month ethnobotanical research]

2004
San Agustín Oapan [4 months: Jan.–Feb., June–July]
Directed literacy workshop with 3 Nahuatl speakers working on book of Nahuatl stories for the Mexican Secretaría de

Educación Pública

2003
San Agustín Oapan [2 months]
Directed literacy workshop with 3 Nahuatl speakers working on book of Nahuatl stories for the Mexican Secretaría de Educación Pública; worked on a regional grammar with bilingual teachers from the Balsas River Valley; conducted (ethno)botanical research in collaboration with botanists from the Universidad Nacional Autónoma de México

2002
San Agustín Oapan [2 months]
Directed literacy workshop with 6 Nahuatl speakers working on transcribing Nahuatl-language testimonials of the migration experience to the US

2001
San Agustín Oapan, Ameyaltepec, San Juan Tetelcingo [1 month]
Project director for ethnobotanical research team involving 4 Nahuatl consultants and 2 botanists; collection of 350 species, photographic archive of all samples, 40 hours of digital Nahuatl recordings about plant use and description

2001
San Agustín Oapan [1 month]
Directed literacy workshop with 6 Nahuatl speakers working on transcribing Nahuatl-language testimonials of the migration experience to the US

1985–87
San Agustín Oapan, Guerrero [20 months uninterrupted]
ethnographic and linguistic fieldwork: local and regional history; land tenure and use; intercommunity agrarian conflicts; agrarian production; production and commercialization of artisanry; Balsas Nahuatl lexicon, grammar and texts

1983–85
Ameyaltepec, Guerrero [23 months uninterrupted]
ethnographic and Balsas Nahuatl linguistic fieldwork

1979–80
Ameyaltepec, Guerrero [13 months uninterrupted]
Ameyaltepec (Balsas) Nahuatl lexicon and grammar

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

"Silvestre Pantaleón"

The following awards and exhibitions demonstrate Amiths commitment to community education and social action.

AWARDS:
Silvestre Pantaleón. Documentary in Nahuatl with English, Spanish, and Nahuatl subtitles. Jonathan D Amith (producer, codirector), Roberto Olivares (director). 65 mins. won the following awards:

Gran Prix Tehuikan as best film (all categories) 21st Montreal First Peoples' Festival 2011
Premio 360° (Principal prize), DocsDF, VI Festival Internacional de Cine Documental de la Ciudad de México with a $5,000 US prize and national broadcast on Canal 11, the government cultural television station for Mexico City

Mejor Largometraje Documental Mexicano (Best Feature-length Mexican Documentary) at the 9th Festival Internacional de Cine de Morelia with a prize that includes $120,000 Mexican pesos (about $10,000 US), a Sony HVR-V1N/1 camera, the award "Canana/Ambulante Distribución Digital (to support the digital distribution of the documentary in Mexico); acceptance in the Ambulante Gira de Documentales 2012 (international selection of documentaries screened in cities throughout Mexico)

Jury Prize (Premio de Jurado) Festival de Cine y Video Kayche: Tejidos Visuales.

Winner in Category "Infancia, Juventud y Tercera Edad (Infancy, Youth and Elders)," VII Encuentro Hispanoamericano

de Cine y Video Documental Independiente Contra el Silencio, Todas las Voces Amith, curator

2002
Organized material of Balsas Nahuatl art for the exhibit Indiens : Chiapas > Mexico > Californie, an exhibition on indigenous political art held at Parque La Villette, Paris, France, 22 May to 17 November, 2002 1995

Curator for Por los caminos del sur … imágenes guerrerenses [Collective photography exhibit] Museo Nacional de Antropología, Mexico City; June 19–23, 1995

1993–95
Curator for The Amate Tradition: Innovation and Dissent in Mexican Art [Exhibition of paintings, ceramics, carved wood, ethnographic objects and photography from the region of San Agustín Oapan, Guerrero] Mexican Fine Arts Center Museum, Chicago; Jan. 27–May 27, 1995

1992
Curator for Cuando yo me levanto … Cuando yo agarro mi camino [Exhibition of drawings and photographs from central Guerrero] Feria Internacional del Libro, Guadalajara; Nov. 28–Dec. 7, 1992

Additional CV for co-applicant

Title

Dr

First name

Gary

Family name

Holton

Nationality

US

Title of current post or study

Professor of Linguistics

Date of appointment or registration

August 1999

Name of employer or place of study

University of Alaska Fairbanks

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
2000	PhD	Linguistics	University of California, Santa Barbara
1997	MA	Linguistics	University of California, Santa Barbara
1987	MS	Mathematics	University of Michigan

1986	BS	Mathematics	University of Alaska Fairbanks

Employment
List your last 3 positions.

List any publications or presentations relevant to you proposal for this additional cv

Holton, Gary. 2014. Kinship in the languages of Alor-Pantar. Alor Pantar Languages: History and Typology, ed. by Marian Klamer, 199-245. Berlin: Language Sciences Press.

Holton, Gary and Marian Klamer. 2015. The Papuan Languages of East Nusantara. The Languages and Linguistics of New Guinea: A Comprehensive Guide, ed. by Bill Palmer. (The World of Linguistics, vol. 4.) Berlin: Mouton.

Holton, Gary. 2014. Sketch of Western Pantar (Lamma). Papuan Languages of Timor- Alor-Pantar, ed. by Antoinette Schapper. Berlin: Mouton.

Klamer, Marian, Antoinette Schapper, Greville Corbett, Gary Holton, František Kratochvíl and Laura C. Robinson. 2014. Numeral words and arithmetic operations in the Alor-Pantar languages. Alor Pantar Languages: History and Typology, ed. by Marian Klamer, 337-374. Berlin: Language Sciences Press.

Holton, Gary and Laura C. Robinson. 2014. The linguistic position of the Timor-Alor-Pantar languages. Alor Pantar languages: History and Typology, ed. by Marian Klamer, 155-198. Berlin: Language Sciences Press.

Holton, Gary and Laura C. Robinson. 2014. The internal history of the Alor-Pantar language family. Alor Pantar Languages: History and Typology, ed. by Marian Klamer, 55-98. Berlin: Language Sciences Press.

Holton, Gary. 2014. Numeral classifiers and number in two Papuan outliers of East Nusantara. Number and Quantity in East Nusantara, ed. by M. Klamer and F. Kratochvíl, 79-102. Canberra: Asia-Pacific Linguistics.

Fedden, Sebastian, Dunstan Brown, Greville Corbett, Gary Holton, Marian Klamer, Laura C. Robinson, and Antoinette Schapper. 2013. Conditions on pronominal marking in the Alor-Pantar languages. Linguistics 51(1).33-74.

Robinson, Laura C. and Gary Holton. 2012. Reassessing the wider genetic affiliations of the Timor-Alor-Pantar languages. History, Contact and Classification of Papuan Languages, ed. by H. Hammarström and W. van den Heuvel, 59-87. (Special Issue of Language and Linguistics in Melanesia.) Port Moresby: Linguistic Society of Papua New Guinea

Robinson, Laura C. and Gary Holton. 2012. Internal classification of the Alor-Pantar language family using computational methods applied to the lexicon. Language Dynamics and Change 2(2).123-49.

Holton, Gary, Marian Klamer, František Kratochvíl, Laura Robinson, and Antoinette Schapper. 2012. The historical relations of the Papuan languages of Alor and Pantar. Oceanic Linguistics 51(1).86-122.

Holton, Gary. 2011. Landscape in Western Pantar, a Papuan outlier of southern Indonesia. Landscape in Language, ed. by D.M. Mark, A.G. Turk, N. Burenhult & D. Stea, 143-166. Amsterdam: John Benjamins.

Holton, Gary. 2010. Person-marking, verb classes, and the notion of grammatical alignment in Western Pantar (Lamma). Typological and Areal Analyses: Contributions from East
Nusantara, ed. by M. Ewing & M. Klamer, 97-117. (Pacific Linguistics 618.) Canberra: Pacific Linguistics.

Holton, Gary and Mahalalel Lamma Koly. 2008. Kamus Bahasa Pantar Barat (Companion Dictionary of Western Pantar). Kupang, Indonesia: UBB-GMIT.

List any previous fieldwork experience for this additional cv

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

N/A

Additional CV for co-applicant

Title

Dr

First name

Shelley

Family name

James

Nationality

US

Title of current post or study

Associate Botanist & Manager of Pacific Center for Molecular Biodiversity

Date of appointment or registration

2002

Name of employer or place of study

Bishop Museum, Honolulu HI

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
1998	PhD	Botany	University of Western Australia
1993	BSc Hon	Botany	University of Western Australia

Employment
List your last 3 positions.

Date	Position	Employer
1999-2001	Postdoctoral Research Fellow	Department of Botany, University of Hawai'i
1998-1999	Research Assistant	Department of Botany, University of Western Australia
1994-1999	Teaching Assistant	Department of Botany, University of Western Australia

List any publications or presentations relevant to you proposal for this additional cv

JAMES, S.A. 2008. Climate change impacts on native plant communities in Melanesia. Bishop Museum Technical Report 42: 1
LONGENECKER, K. ALLISON, A., BOLICK, H., JAMES, S., LANGSTON, R., PYLE, R., PENCE, D. & TALBOT, S. 2009. A preliminary assessment of exploited reef-fish populations at Kamiali Wildlife Managment Area, Papua New

Guinea. 75 pp.

James, S.A. 2014. Achieving the digitization of biological collections from the Pacific. 29th Meeting of the Society for the Preservation of Natural History Collections, Cardiff, Wales.

JAMES, S.A., et al. 2013. Floral biodiversity in Melanesia: digitization and discovery. 9th International Flora Malesiana Symposium. Bogor, Indonesia.

JAMES, S.A., et al. 2013. Digitization initiatives at the Bishop Museum: baseline data for conservation in the Pacific. Hawai'i Conservation Conference, July 2013.

JAMES, S.A., et al. 2013. Digitization initiatives at the Bishop Museum: baseline data for conservation in the Pacific. 12th Pacific Science Inter-Congress. Suva, Fiji.

JAMES, S.A., A. ALLISON and N. SNOW. 2011. Floral biodiversity in New Guinea: how many species are there? IBC2011 Abstract Book, pp. 73-74

JAMES, S, D. MASAKI, A. ALLISON, and R. PYLE, R. 2011. Online mapping of botanical resources for Hawaii and New Guinea: test cases for the Pacific Basin. IBC2011 Abstract Book, pp. 384

JAMES, S.A. and A. ALLISON. 2011. Information infrastructure for advancing conservation in Melanesia. Proceedings of the Evolution of Life on Pacific Islands and Reefs: Past, Present and Future Conference, Honolulu, HI.

JAMES, S.A. 2010. Digitizing the Herbarium Pacificum: Uses for Ecosystem Management and Restoration in the Pacific. Proceedings of the Hawai'i Conservation Conference, Honolulu HI.

List any previous fieldwork experience for this additional cv

Twenty years of experience as a research scientist, conducting botanical research and fieldwork in the United States (Hawaii, Wyoming), Australia, Panama and Papua New Guinea (6 years)

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

http://pbs.bishopmuseum.org/papuanplants/

Discovery and inventory of Papua New Guinea's megadiverse flora (NSF-DEB-0950207). $600,000. 2010-2014 (PI).

Collaborative Research: Consortium of Pacific Herbaria – A Research and Collections Network for Oceania. (NSF-DBI 1057453). $691,466, 2011-2013 (PI).

Andrew W. Mellon Foundation: Digitizing endangered and extinct species collections and specimens from the Pacific Basin at the Bernice P. Bishop Museum (BISH). $67,000, 2011-2014.

James C. and Catherine T. Macarthur Foundation: Information Infrastructure for Assessing Climate Change and Advancing Conservation in Melanesia. $500,000, 2011-2013.

Additional CV for co-applicant

Title

Dr

First name

Yuni

Family name

Kim

Nationality

Title of current post or study

Lecturer in Phonetics and Phonology

Date of appointment or registration

2009

Name of employer or place of study

University of Manchester, Division of Linguistics and English Language

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
2008	PhD	Linguistics	U California Berkeley
2005	MA	Linguistics	U California Berkeley
2002	AB	Linguistics	Harvard University

Employment
List your last 3 positions.

Date	Position	Employer
N/A		

List any publications or presentations relevant to you proposal for this additional cv

Articles and Book Chapters

Under revision
Kim, Yuni and Andrew Koontz-Garboden. The cross-categorial behavior of nonverbal property concept words in Huave. International Journal of American Linguistics.

Under review
Kim, Yuni. Tonal overwriting and inflectional exponence in Oaxacan Amuzgo. For J.-L. Leonard & E. Palancar (eds.) volume on Tone and Inflection. Awaiting review, Mouton de Gruyter.

To appear
Kim, Yuni. Fuentes de rasgos fonológicos de préstamos castellanos en huave de San Francisco del Mar. [Sources of phonological features of Spanish loanwords in San Francisco del Mar Huave.] Submitted to the proceedings of the 1a Jornada de Estudios Huaves.

2013
Kim, Yuni. Estrategias de pasivización en la morfología verbal de huave. [Passivization strategies in Huave verb morphology.] Amerindia 37(1): 274-298.

2011
Kim, Yuni. Algunas evidencias sobre representaciones tonales en amuzgo de San Pedro Amuzgos. [Some evidence regarding tonal representations in Oaxacan Amuzgo.] In N. England, ed., Proceedings of CILLA V. Online at http://www.ailla.utexas.org/site/cilla5_toc.html.

2010
Kim, Yuni. Phonological and morphological conditions on affix order in Huave. Morphology 20(1): 133-163.

2009
Kim, Yuni. Alternancias causativas y estructura de eventos en el huave de San Francisco del Mar. [Causative alternations and event structure in San Francisco del Mar Huave.] In N. England, ed., Proceedings of CILLA IV. Online at http://www.ailla.utexas.org/site/cilla4_toc.html.

Theses

2008
Kim, Yuni. Topics in the Phonology and Morphology of San Francisco del Mar Huave. PhD thesis, University of California at Berkeley.

Manuscripts in preparation

In preparation
Kim, Yuni. On the status of allophones in the Contrastivist Hypothesis. Special issue of Lingua on "The representational consequences of marginal contrasts."

In preparation
Kim, Yuni. Morphological and phonological subregularities in Oaxacan Amuzgo inflectional class assignment. For M. Baerman, T. Feist & E. Palancar (eds.) volume on inflectional classes in Oto-Manguean languages.

In preparation
Kim, Yuni. Patrones sintácticos de modificación de grado en huave de San Francisco del Mar.

List any previous fieldwork experience for this additional cv

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

Invited Talks

2014
Phonological domains in morphology versus syntax: evidence from Huave. University of Cambridge, 23 October.
Prefix-suffix asymmetries in Huave morphophonology. University of Edinburgh, 9 October.
Morphological and phonological subregularities in Amuzgo inflectional class assignment. Workshop on Inflectional Morphology and Verb Classes in the Oto-Manguean Languages of Mexico, University of Surrey, 13-14 March.

2013
Stem allomorphy, tone stability, and tonal overwriting in Amuzgo person/number inflection. Workshop on Disentangling the Inflectional Role of Tone, Paris III, 17-18 June.

2011
Phonetics vs. phonology in Huave vowel-consonant interactions. Cambridge University Linguistic Society, 24 November.

2010
Infix harmony in Huave: feature realization and bidirectionality. CASTL (Centre for Advanced Study in Theoretical Linguistics), Tromsø, 7 May.
Morphology and prosody in Huave phonological domains. CASTL Colloquium talk, Tromsø, 6 May.
Phonology-morphology domain (mis)matches in Huave. SOAS (School of Oriental and African Studies) Linguistics Departmental Seminar Series, London, 2 March.

2009
Ethical issues in linguistic fieldwork. Teaching Field Linguistics event (LLAS Subject Centre), SOAS, London, 22 May.
Intonational variation in Huave. Institute for Linguistics and Language Studies launch event, University of Manchester, 28 April.
Affix mobility in Huave. Institute for Linguistics and Language Studies Seminar Series, University of Manchester, 24 March.

Conference Presentations

2014
Edge-based prosodic mapping and the prefix-stem domain boundary in Huave. North East Linguistics Society, October 31-November 2, MIT.

2012
Allophony and opacity in Huave pre-fricative diphthongs. Manchester-Salford Forum in Linguistics, November 2-3, Manchester.
(With Andrew Koontz-Garboden.) Possession and property concept predication in Huave. Workshop on Structure and Constituency in the Languages of the Americas (WSCLA) 17, March 9-11, Chicago.

2011
Algunas evidencias sobre representaciones tonales en amuzgo de San Pedro Amuzgos. [Some evidence regarding tonal representations in Oaxacan Amuzgo.] Conference on Indigenous Languages of Latin America (CILLA) V, October 6-8, Austin.

2010
Préstamos castellanos en el umbeyajts: hacia una cronología. [Spanish loanwords in San Francisco del Mar Huave: towards a chronology.] I Jornada de Estudios Huaves, UNAM, Mexico City, September 9-10.
Diphthongization and contrast realization in Huave. Presented at Old World Conference in Phonology 7, January 28-30, Nice.
Comparing Mesoamerican areal features in two varieties of Huave. SSILA Annual Meeting, January 7-10, Baltimore.

2009
Alternancias causativas en el huave de San Francisco del Mar. [Causative alternations in San Francisco del Mar Huave.] Conference on Indigenous Languages of Latin America (CILLA) IV, October 29-31, Austin.

2008
Representational issues in Huave fission and diphthongization. 18th International Congress of Linguists, July 21-26, Seoul.
The interaction of phonological and morphological conditions on affix order in Huave. Workshop on Affix Ordering at the 13th International Morphology Meeting, February 3-6, Vienna.
Vowel breaking and palatalization in Huave. SSILA Annual Meeting, January 3-6, Chicago.

2007
Consonant-vowel interactions and vowel copy epenthesis in Huave. 15th Manchester Phonology Meeting, Manchester, May 24-26.
Segmental and autosegmental aspects of Huave glottal fricatives. SSILA Annual Meeting, Anaheim, January 4-7.

2006
Mobile affixes and affix ordering in Huave. LSA Annual Meeting, Albuquerque, January 5-8.

2005
Fieldwork strategies for endangered dialects of Huave. (With Mischa Park-Doob.) Poster session on Challenges and Issues in Endangered LanguageFieldwork, LSA Annual Meeting, Oakland, January 6-9.

Additional CV for co-applicant

Title

Ms

First name

Silvia Hortensia

Family name

Salas Morales

Nationality

Mexico

Title of current post or study

Curator of the SERO herbarium and project coordinator of the Sociedad para el Estudio de los Recursos Bióticos de Oaxaca (SERBO)

Date of appointment or registration

January 2000

Name of employer or place of study

Sociedad para el Estudio de los Recursos Bióticos de Oaxaca (SERBO), Oaxaca City, state of Oaxaca, Mexico

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
2014	PhD	Botany	National Autonomous University of Mexico

Employment
List your last 3 positions.

Date	Position	Employer
January 1991-present	Project Coordinator	Sociedad para el Estudio de los Recursos Bióticos de Oaxaca (SERBO) and Curator of the SERO herbarium, Oaxaca City, Oaxaca, Mexico

List any publications or presentations relevant to you proposal for this additional cv

Salas Morales, S.H. and J.A. Meave. 2012. Elevational patterns in the vascular flora of a highly diverse region in southern México. Plant Ecology 213: 1209–20.
———— and F. Maldonado Ruiz, J. L. Lucas-González , and A. Sánchez Martínez. 2011. El herbario SERO en Oaxaca. In A. J. García Mendoza and J. A. Meave, eds., Diversidad florística de Oaxaca, de musgos a angiospermas (colecciones y lista de especies. Mexico City: Universidad Nacional Autónoma de México (UNAM) and Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO).
————, A. Saynes, and L. Schibl. 2003. Flora de la costa de Oaxaca, México: Lista florística de la región de Zimatán. Boletín de la Sociedad Botánica de México72: 21–58.
————, L. Schibli, A. Nava Zafra, and A. Saynes Vásquez. 2007. Flora de la Costa de Oaxaca, México (2): Lista florística comentada del Parque Nacional Huatulco. Boletín de la Sociedad Botánica de México 81:101-130.

List any previous fieldwork experience for this additional cv

Twenty-five years of experience in botanical fieldwork throughout Mexico, although principally in the state of Oaxaca, yielding a total of over 7,500 botanical specimens

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

Development of a state herbarium in Oaxaca with over 20,000 voucher specimens already incorporated and databased as well as another 10,000 specimens in the process of accession.

Additional CV for co-applicant

Title

Mr

First name

Emerson

Family name

Odango

Nationality

US

Title of current post or study

PhD Candidate (ABD)

Date of appointment or registration

2009-2015 (anticipated graduation)

Name of employer or place of study

University of Hawaii at Manoa

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
2015	PhD	Linguistics	University of Hawaii
2013	MA	Linguistics	University of Hawaii
2005	BA	Interdisciplinary Studies: Linguistics	College of William and Mary

Employment
List your last 3 positions.

Date	Position	Employer
Sept-Dec 2012	Student Assistant	Center on Disability Studies (U Hawaii)
Sept 2009-Dec 2012	Graduate Assistant	Department of Linguistics (U Hawaii)
Sep 2006-May 2009	Peace Corps Volunteer (elementary school teacher)	US Peace Corps

List any publications or presentations relevant to you proposal for this additional cv

* In press. A discourse-based approach to the language documentation of local ecological knowledge. Language Documentation & Conservation.

* In press. Local ecological knowledge in Mortlockese narrative: Stance, identity, and knowing. In Farzana Gounder (ed.), Narrative practice and identity construction in the Pacific Islands. Philadelphia, PA: John Benjamins.

* 2012. Tittilap 'Storytelling' as a means of sharing and shaping traditional ecological knowledge in Micronesia. Langscape 2(10). 37–42.

* 2013. Traditional ecological knowledge in the Mortlockese classroom. Paper presented at the 29th Annual Pacific Rim

International Conference on Disability & Diversity. Hawai'i Convention Center, Honolulu, HI. 29–30 April, 2013.

*2013. The role of narrative in the transmission and contextualization of traditional ecological knowledge in Mortlockese. Paper presented at the 3rd International Conference on Language Documentation and Conservation (ICLDC 3). The University of Hawai'i at M?noa, Honolulu, HI. 28 February–3 March, 2013.

List any previous fieldwork experience for this additional cv

* 2014. April–August. Fieldwork on Pakin Atoll and Pohnpei, funded by the East-West Center Field Research Funding grant.

* 2013. June–August. Fieldwork on Pakin Atoll and Pohnpei, funded by the University of Hawai'i at M?noa Graduate Student Organization.

* 2013. May. Fieldwork on Majuro (Marshall Islands), Nauru, and Tarawa (Kiribati), funded by Island Research & Education Initiative.

* 2012. May–July. Fieldwork on Pakin Atoll and Pohnpei, funded by the University of Hawai'i at M?noa Department of Linguistics Russell J. and Dorothy S. Bilinski Pre-Dissertation Research Award.

* 2011. May–June. Fieldwork on Pakin Atoll and Pohnpei, funded by the University of Hawai'i at M?noa Arts and Sciences Student Research Award.

* 2010. May–July. Fieldwork on Pakin Atoll, Pohnpei, and Chuuk, funded by the University of Hawai'i at M?noa Arts and Sciences Student Research Award and Island Research & Education Initiative.

* 2009. June. Fieldwork on Chuuk, funded by Island Research & Education Initiative.

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

* 2014, Spring. Organizer of "A Workshop on Local Ecological Knowledge from the perspectives of the social sciences, the arts, the humanities, education, and related fields" (28 February and March 1, 2014). Funded by the University of Hawai'i at M?noa Graduate Student Organization Interdisciplinary Events Award.

* 2013, Spring. Member of Student Steering Committee (Publicity and Technology) for the 3rd International Conference on Language Documentation & Conservation (28 February–3 March, 2013).

* 2012, Fall. Participant in NSF-funded project titled "Hawai'i-Fiji Workshop and Training on Social-Ecological Resiliency to Climate Change Collaboration between University of Hawai'i at Manoa-University of the South Pacific" (3–7 September, 2012).

Additional CV for co-applicant

Title

Dr

First name

David

Family name

Lorence

Nationality

USA

Title of current post or study

Director of Science and Conservation Department

Date of appointment or registration

March 1987

Name of employer or place of study

National Tropical Botanical Garden (NTBG), Kalaheo, Hawaii, USA

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
1980	PhD	Plant Biology	Washington University, St. Louis MO, USA
1970	BA	Botany	University of Wisconsin

Employment
List your last 3 positions.

Date	Position	Employer
2002-Present	Director of Science and Curator of the Herbarium	National Tropical Botanical Garden
1996-2002	Senior Research Botanist and Curator of the Herbarium	National Tropical Botanical Garden

List any publications or presentations relevant to you proposal for this additional cv

Lorence, D. H., W. L. Wagner, A. Mouly & J. Florence. 2007. Revision of Ixora (Rubiaceae) in the Marquesas Islands (French Polynesia). Botanical J. Linnean Society 155: 581-597.

Hillmann-Kitalong, A., R. A. Demeo, T. Holm, C. Costion, D. Lorence & T. Flynn. 2008. Plants of Palau: provisional checklist of the vascular plants of Palau with habitat, form, status, and Palauan names. In, A. Hillmann-Kitalong, R.A. DeMeo, & T. Holm, A Field Guide to Native Trees of Palau, 236 p.

Lorence, D. H. and T. Flynn. 2009. Checklist of the vascular plants of Pohnpei. Chapter 9, p. 524-566 in The Ethnobotany of Pohnpei: Plants, People and Island Culture. Edited by Michael J. Balick. University of Hawaii Press and New York Botanical Garden, 585 p.

Herrera, K., D. H. Lorence, T. Flynn & M. J. Balick. 2010. Checklist of the Vascular Plants of Pohnpei, Federated States of Micronesia, with Local Names and Uses. Allertonia 10: 1-204.

Costion, C. M. & D. H. Lorence. 2012. The endemic plants of Micronesia: a geographical checklist and commentary. Micronesica 42: 51-100.

Lorence, D. H. & K. R. Wood. 2012. Psychotria kosraensis (Rubiaceae), A New Species from Kosrae, Caroline Islands, Micronesia. Novon 22(1) 51-55.

Wagner, W. L. and D. H. Lorence. 2012- . Flora of Micronesia website.
http://botany.si.edu/pacificislandbiodiversity/micronesia/index.htm

Wagner, W. L. and D. H. Lorence. 2005- . Flora of the Marquesas Islands website.
http://botany.si.edu/pacificislandbiodiversity/marquesasflora/index.htm

List any previous fieldwork experience for this additional cv

Mascarene Islands (1970—1976; 1978—1979, 1991, 1994, 2008); Costa Rica (1977); Madagascar, Seychelles and Comoro Is. (1978—1979; 2008); SE. USA (1976—1980); Mexico (1980—1987); Hawaiian Is. (1987—present); Marquesas Is. (1988; 2003—2004); Australia (1992, 2003); Micronesia [Kosrae, Pohnpei, Palau, Yap] (1996, 1997, 1998, 2005, 2006, 2008, 2009, 2010); New Caledonia (1998); Singapore (1998); Canary Is. (2000); American Samoa (2001); Society Is. (2004); Peru (2008), Greece (2009), Sarawak and Peninsular Malaysia (2010); Costa Rica, Panama, Colombia (2012), Indonesia: Java, Bali, Sulawesi (2014) .

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

Grants:
2012-2014: Grant ($107,841) from Institute of Museum and Library Services (IMLS) for databasing and scanning collection of 15,000 Pacific Island botanical slides to make images available on website.

2011-2014: Grant ($321,957) from National Science Foundation for collaborative Consortium of Pacific Herbaria—A Research and Collections Network for Oceania, to mount and database backlog, photograph and digitize entire Herbarium PTBG (71,000 specimens).

2010: Grant ($11,500) for rugged terrain botanical inventory of Kosrae, Federated States of Micronesia (New York Botanical Garden).

2009: Grant ($8,000) for rugged terrain botanical inventory of Pohnpei and Kosrae, Federated States of Micronesia (New York Botanical Garden).

2008: Grant ($8,000) for rugged terrain botanical inventory of Palau, Micronesia (New York Botanical Garden).

2007: Grant ($8,000) for rugged terrain botanical inventory of Pohnpei, Federated States of Micronesia (New York Botanical Garden).

2002—2006: Grant ($329,981) (private funding source) for botanical inventory of Marquesas Islands (French Polynesia) (with W.L. Wagner, Smithsonian Institution).

2000—2002: Grant ($119,350) from U.S. National Park Service to inventory vascular plants in the National Park of American Samoa (with D. Ragone, NTBG).

Relevant Synergistic Activities
Museum service: Responsible for management of all activities related to the storage, care, and access to Herbarium PTBG by staff, students, visiting researchers, and outside users.
Service to scientific societies: Editor of Allertonia (1988-present); Treasurer and Chair of Research Grants Committee, Heliconia Society International (2004-present); NTBG institutional representative for International Association for Plant Taxonomists and Association for Systematics Collections; Chair, Kauai County Arborist Committee

Additional CV for co-applicant

Title

Dr

First name

Barry

Family name

Conn

Nationality

Australian

Title of current post or study

Associate Professor and Principal Research Scientist/Scientific Editor of Telopea

Date of appointment or registration

01/03/1987

Name of employer or place of study

National Herbarium of New South Wales, Royal Botanic Gardens Sydney/University of Sydney

Education/Training
List your highest/latest qualification first.

Date	Degree	Subject	Institution
1983	PhD	Botany	U Adelaide
1975	MS	Botany	U Melbourne
1973	BS	Education	U Melbourne

Employment
List your last 3 positions.

Date	Position	Employer
September 2005-present	Principal Research Scientist	National Herbarium of New South Wales, Royal Botanic Gardens Sydney
March 1987-August 2005	Senior Botanist	National Herbarium of New South Wales, Royal Botanic Gardens Sydney
April 1982-February 1987	Botanist	National Herbarium of Victoria, Royal Botanic Gardens Melbourne

List any publications or presentations relevant to you proposal for this additional cv

Hosking JR, Conn BJ, Lepschi BJ, Barker CH (2011) Plant species first recognised as naturalised or naturalising for New South Wales in 2004 and 2005, Cunninghamia 12: 85–114.
Conn BJ (2011). Botanical collecting. pp. 250–280. In Thieberger N. (Ed.). 'The Oxford handbook of linguistic fieldwork' (Oxford University Press: Oxford).
Webber BL, Born C, Conn BJ, Hadiah JT, Zalamea P-C (2011). What is in a name? That which we call Cecropia peltata by any other name would be so invasive? Plant Ecology & Diversity 3: 241–245 (http://dx.doi.org/10.1080/17550874.2011.610372)
Conn BJ, Damas KQ (2010). Goniothalamus amplifolius B.J.Conn & K.Q.Damas (Annonaceae), a new species from Papua New Guinea. Telopea 12: 505–510.
Sudarmono, Conn BJ (2010). Genetic variation of populations of Scutellaria slametensis (Lamiaceae), Jawa Tengah, Indonesia. Garden's Bulletin Singapore 62: 163–179.
Sudarmono, Conn BJ (2010). Scutellaria slametensis (Lamiaceae), a new species from Jawa Tengah, Indonesia. Telopea 12: 463–468.
Conn BJ, Hadiah JT (2009). Impact of climate change on distribution of Elatostema (Urticaceae) in Indonesia. pp. 31–39. Prosiding Konservasi Flora Indonesia dalam mengatasi dampak pemanasan global (UPT Balai Konservasi Tumbuhan Kebun Raya 'Eka Karya' Bali – LIPI, Candikuning).
Conn B.J (2008+). Census of Vascular Plants of Papua New Guinea (http://www.pngplants.org/PNGCensus)

Hadiah JT, Conn BJ, Quinn CJ (2008). Infra-familial phylogeny of Urticaceae using Chloroplast sequence data. Australian Systematic Botany 21(5): 379–385.

Hosking JR, Conn BJ, Lepschi BJ, Barker CH (2007). Plant species first recognised as naturalised for New South Wales in 2002 and 2003, with additional comments on species recognised as naturalised in 2000–2001. Cunninghamia 10: 139–166.

Conn BJ, Damas KQ (2006). From trees to descriptions and identification tools, pp. 33–44. In Barwick L and Thieberger N (Editors). Sustainable data from digital fieldwork (Sydney University Press). (http://hdl.handle.net/2123/1292)

Conn BJ, Lee LL, Damas KQ (2006+). 'Guide to Trees of Papua New Guinea' (http://www.pngplants.org/PNGtrees)

Conn BJ, Lee LL, Kuria T (2006+). Papua New Guinea National Herbarium (LAE): Plant Collectors of Papua New Guinea (http://www.pngplants.org/colls.php)

Conn BJ (2005). Botanical and horticultural collections – Information gathering, management, inventory and monitoring. (Kebun Raya Bogor: Indonesia), pp. 1–53.

Conn BJ, Hill KD, Lee LL (2004+). 'PlantNET – The Plant Information Network System of the Botanic Gardens Trust Version 2.0' (http://plantnet.rbgsyd.nsw.gov.au/)

Conn BJ, Lee LL, Kiapranis R (2004+). 'PNGplants database: Plants of Papua New Guinea' (http://www.pngplants.org/PNGdatabase)

Beeman RS, Conn BJ (2003). Automated geoparsing and georeferencing of Malesian collection locality data. Telopea 10: 43–52.

Conn BJ (2003). Information standards in botanical databases – the limits to data interchange. Telopea 10(1): 53–60.

Hosking JR, Conn BJ, Lepschi BJ (2003). Plant species first recognised as naturalised for New South Wales over the period 2000–2001. Cunninghamia 8: 175–187.

Hosking JR, Conn BJ, Lepschi BJ (2001). Detection of recent plant naturalisations in New South Wales. Proceeding of 11th Biennial Noxious Plants Conference. Moama, NSW (September 4–6, 2001), 4 pp.]

Tame T, Kodela P, Conn BJ, Hill K (2001). WattleWeb - a web guide to the wattles of New South Wales. (http://plantnet.rbgsyd.nsw.gov.au/PlantNet/wattle/index.html)

Carter RJ, Hosking JR, Conn BJ (1999). Strategies to manage new weed incursions - New South Wales, pp. 646–650. In Bishop AC, Boersma M and Barnes CD (Eds), 'Weed Management into the 21st Century: Do we know where we're going?' Proceedings of the Twelfth Australian Weeds Conference. (CSIRO: Hobart).

Carter RJ, Hosking, JR, Conn BJ (1999). Strategies to manage new weed incursions - New South Wales. Proceedings of the Australian Weeds Conference, (CSIRO: Hobart), 4 pp.

Conn BJ (1998). Living on the edge - the last harvest. In Peng C-I and Lowry II PP (Eds). 'Rare, threatened and endangered floras of Asia and the Pacific rim, Institute of Botany Academia Sinica Monograph (Taipei), Series 16: 207–226.

Conn BJ (Editor) (1995). Handbooks of the Flora of Papua New Guinea', vol. 3, 292 pp. (Melbourne University Press: Carlton).

Conn BJ (1995). Droseraceae, pp. 49–55. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).

Conn BJ (1995). Buddlejaceae, pp. 127–131. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).]

Conn BJ (1995). Loganiaceae, pp. 132–188. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).

Conn BJ (1995). Nelumbonaceae, pp. 189–191. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).

Conn BJ (1995). Nymphaeaceae, pp. 192–202. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).

Conn BJ, Frodin DG (1995). Species of Osmoxylon (Araliaceae) in the Solomon Islands (with additional notes on New Guinean species), pp. 271–285. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).

Conn BJ, Kerenga K (1995). Erythroxylaceae, pp. 56–60. In Conn BJ (Ed.). 'Handbooks of the Flora of Papua New Guinea', vol. 3 (Melbourne University Press: Carlton).

Conn BJ (1994). Revision of Logania section Stomandra (Loganiaceae). Telopea 5: 657–692.

Conn BJ (1994). Documentation of the flora of New Guinea. In Peng C-I and Chou CH (Eds). 'Biodiversity and terrestrial ecosystems'. Botany Bulletin Academia Sinica Monograph Ser. 14: 123–156.

Conn BJ (1993). Lemnaceae, pp. 36–38. In Harden GJ (Ed.). Flora of New South Wales, vol. 4 (University of NSW Press: Kensington).

Conn BJ (1993). Eriocaulaceae, pp. 264–265. In Harden GJ (Ed.). Flora of New South Wales, vol. 4 (University of NSW Press: Kensington).

Conn BJ (1993). Hydatellaceae, pp. 265–266. In Harden GJ (Ed.). Flora of New South Wales, vol. 4 (University of NSW Press: Kensington).

Conn BJ, Brown EA (1993). Review of Fagraea gracilipes Complex (Loganiaceae). Telopea 5: 363–374

Doust ANL, Conn BJ (1993). Xyridaceae, pp. 261–263. In Harden GJ (Ed.). Flora of New South Wales, vol. 4 (University of NSW Press: Kensington).

Conn BJ (1992). Avicenniaceae, pp. 621. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Lamiaceae, pp. 623–644. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Loganiaceae, pp. 477–481. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Buddlejaceae, pp. 551 and 552. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Oxalidaceae, pp. 17–22. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Solanaceae, pp. 341–372. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Tropaeolaceae, pp. 31 and 32. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Verbenaceae, pp. 611–618. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1992). Chloanthaceae, pp. 618–621. In Harden GJ (Ed.). Flora of New South Wales, vol. 3 (University of NSW Press: Kensington).

Conn BJ (1986). Prostanthera, pp 1209–1219. In Jessop JP and Toelken HR (Eds). 'Flora of South Australia'. Vol. 3 (South Australian Government Printing: Adelaide).

Conn BJ (1986). Westringia, pp. 1230–1232. In Jessop JP and Toelken HR (Eds). 'Flora of South Australia'. Vol. 3 (South Australian Government Printing: Adelaide).

Conn BJ (1985). Nymphaeaceae, pp. 191–201. In Leach GJ and Osborne PL (Eds). 'Freshwater plants of Papua New Guinea' (UPNG Press: Waigani). [CR: 1]

Conn BJ (1983). Droseraceae, pp. 2527–2530. In Royen P van, 'The Alpine Flora of New Guinea'. Vol. 4 (J. Cramer: Vaduz).

Conn BJ (1983). Loganiaceae, pp. 2547–2657. In Royen P van, 'The Alpine Flora of New Guinea'. Vol. 4 (J. Cramer: Vaduz).

Conn BJ (1983). Aquatic and semi-aquatic flora of the Purari River system, pp. 283–293. In Petr T (Ed.). 'The Purari - Tropical environment of a high rainfall river basin'. Monographiae Biologicae, vol 51 (Junk Publ.: The Hague).

Conn BJ (1979). Phragmites karka and the floating islands of Lake Tebera (Gulf Province), with notes on the distribution of Salvinia molesta and Eichhornia crassipes in Papua New Guinea, pp. 31–36. In Petr T (Ed.). 'Ecology of the Purari River catchment. Purari River (Wabo) hydroelectric scheme environmental studies'. Vol. 10 (Office of Forests: Waigani).

Conn BJ (1979). The vegetation of the lakes of the Mt Giluwe area (Southern Highlands Province), Papua New Guinea, pp. 37–62. In Petr T (Ed.). 'Ecology of the Purari River catchment. Purari River (Wabo) hydroelectric scheme environmental studies'. Vol. 10 (Office of Forests: Waigani).

Conn BJ (1979). Notes on the aquatic and semi-aquatic flora of Lake Kutubu (Southern Highlands Province), Papua New Guinea, pp. 63–90. In Petr T (Ed.). 'Ecology of the Purari River catchment. Purari River (Wabo) hydroelectric scheme environmental studies'. Vol. 10 (Office of Forests: Waigani).

Conn BJ (1977). Notes on aquatic and semi-aquatic flora, pp. 21–27. In Petr T (Ed.). 'Workshop 6 May 1977. Purari River (Wabo) hydroelectric scheme environmental studies'. Vol. 1 (Office of Environment & Conservation: Waigani).

List any previous fieldwork experience for this additional cv

Extensive fieldwork:
• throughout all States and Territories of Australia (every year since 1972,);
• throughout the main island of Papua New Guinea (almost every year since 1974,);
• throughout Indonesian islands of Sumatera, Jawa, Bali, Sulawesi (1997, 2001, 2003, 2005, 2007, 2011)
• New Zealand (1977)
• Fiji (1977)
• Myanmar (2005)
• Singapore (2007, 2010)

List any other significant awards, exhibitions or achievements relevant to this application for this additional cv

Current& Recent Grants:
2010: AUD$10,000 "Molecular systematics and phylogeography of Prostanthera lasianthos (Lamiaceae)" ABRS

2013: AUD$10,000 "Molecular systematics of Logania (Loganiaceae)" ABRS
2012–2015: AUD$30,000 "Survey of Tree flora of Papua New Guinea" Mundango Abroad
2012–2015: AUD$220,000 "Systematics of the Prostantheroideae (Lamiaceae): the application of morphological and molecular techniques to resolve tribal, generic and sectional limits" ABRS

Relevant Highlights:
2014– Scientific Advisor to the FAO & Mountain Partnership Project Biodiversity PNG National Forest Inventory
2013– Scientific Editor Telopea
2011–2014 Scientific Advisor to the European Union African-Caribbean-Pacific Secretariat
2010– Honorary Associate Professor, School of Biological Sciences, University of Sydney
2000–2004 Manager, Plant Diversity Section, Royal Botanic Gardens and Domain Trust, Sydney, Australia
1994–1995 Australian Botanical Liaison Officer, Royal Botanic Gardens, Kew, UK

Declaration
I hereby confirm that:

1. To the best of my knowledge, the information provided in this application is accurate and complete.
2. I have read the relevant Information Pack, and Terms & Conditions of Award and, if a grant is made, I agree to abide by them.
3. The necessary facilities will be made available by the host institution to conduct this documentation.
4. I understand that it is my responsibility to request references of the project from my selected referees, to be returned no later than the deadline for the submission of applications.
5. If awarded the grant, I agree to develop an archiving plan in collaboration with ELAR and to deposit the recordings, images, data and metadata.

Declaration Date (dd/mm/yy)

Applicant Signature

The part below should be completed by a representative of the research office/finance office of your host institution which verifies the budget of the grant proposal. This is not part of the electronic online submission form.

Signature

Date:

Name (print)

Institutional stamp

Position in host institution

Name of host institution